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Supp. No. 1

# **Golden Gate Commuter Ferryboat System**

## **Supplement 1**

**By**  
**Philip F. Spaulding And Associates, Inc.**  
**Naval Architects · Marine Engineers**  
**Seattle, Washington**



800084  
NW

GOLDEN GATE COMMUTER

FERRYBOAT SYSTEM

&

OPTIMUM VESSEL DESIGN

San Francisco - Marin Crossing

for

GOLDEN GATE BRIDGE,

HIGHWAY & TRANSPORTATION DISTRICT

SUPPLEMENT I



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Prepared by

PHILIP F. SPAULDING  
Naval Architect

CHARLES F. HEYE  
Transportation Economist

Staff, PHILIP F. SPAULDING & ASSOCIATES, INC.

Naval Architects - Marine Engineers - Mechanical Engineers

65 Marion Street

Seattle, Washington

File: 6963



## FOREWORD

Supplement I contains the basic mathematical computations and analyses that underlie the Spaulding/Heye design study entitled GOLDEN GATE COMMUTER FERRYBOAT SYSTEM.

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## SECTION I

### I. BASIS FOR OPERATING EXPENSE AND FINANCING ANALYSIS

1. Wages & Allowances
2. Stores, Supplies & Equipment
3. Other Vessel Expense
4. Maintenance & Repair
5. Insurance
6. Fuel Oil Auxiliaries
7. Fuel Oil Underway
8. Financing



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## BASIS FOR OPERATING EXPENSE AND FINANCING ANALYSIS

### GOLDEN GATE FERRYBOAT SYSTEM

#### Symbols

L	= Length overall
B	= Maximum breadth
D	= Depth of hull & superstructure
$C_N$	= $\frac{L \times B \times D}{100}$
N	= Number of passenger seats (inside and protected)
SHP	= Total shaft horsepower main engines
D	= Diesel power
GT	= Gas turbine power
Op Ye <sub>1</sub>	= 5082 hour operating year
Op Ye <sub>2</sub>	= 3847 hour operating year
$h_o$	= Hours underway
$h_r$	= Hours in operation
V	= Vessel value

#### 1. Wages & Allowances

(See analyses: A, B, C & D)

#### 2. Stores, Supplies & Equipment

(Deck & Engine Stores including lubricating oil)

Annual Deck Stores cost =  $C_N \times \$1.70$

Lube oil cost (diesel) =  $\$0.00024 \times SHP \times h_o$  (oil @ \$1.00/gal.)

Lube oil cost (turbine) =  $\$0.0000416 \times SHP \times h_o$  (oil @ \$1.50/gal.)

Annual Engine Stores cost (diesel) =  $\$0.71 \times SHP$

Annual Engine Stores cost (turbine) =  $\$0.25 \times SHP$

Annual Miscellaneous Equip. cost (hydrofoils) =  $\$0.00102 \times SHP/h_o$

#### 3. Other Vessel Expense

(Includes fresh water, shore power & communications)

Annual expense =  $C_N \times \$2.58$

4. Maintenance & Repair

Diesel Engine

Annual repair & maintenance cost =  $\$.0010 \times \text{SHP} \times h_o$   
Conventional Vessel

Gas Turbine

Contract with engine mfgr

Cost =  $\$.00326 \times \text{SHP} \times h_o$

Contract with drive mfgr

Cost =  $\$.00105 \times \text{SHP} \times h_o$

Advanced Systems

Gas Turbine

Contract with engine mfgr

Cost =  $\$.00326 \times \text{SHP} \times h_o$

Contract with drive mfgr

Cost =  $\$.00306 \times \text{SHP} \times h_o$

Support Equipment

Cost =  $\$.00184 \times \text{SHP} \times h_o$

Misc. Equipment

Cost =  $\$.00102 \times \text{SHP} \times h_o$

Jet Pump

Cost =  $\$.00175 \times \text{SHP} \times h_o$

Drydocking, painting & hull maintenance

Steel Hull

Annual Cost =  $C_N \times \$5.22$

Aluminum Hull

Annual Cost =  $C_N \times \$9.90$

Passenger Spaces

Annual Cost =  $N \times \$10.90$

5. Insurance

Conventional Vessel cost/yr

Hull & machinery @ 4.0% x V

Protection and indemnity @ 1.0% x V

Advanced Systems cost/yr

Hull & machinery @ 4.5% x V

Protection and indemnity @ \$50. x N

6. Fuel Oil Auxiliaries

Diesel Oil @ 14-1/2¢/gal.

Based on 10 kw

100 pass.

1 kw = 1.341 SHP

Consumption based on fuel rate of .40#/SHP/hr

Cost =  $\$0.0011 \times N \times h_r$

7. Fuel Oil Underway

Diesel Power Diesel Oil @ 14-1/2¢/gal.

Consumption based upon a rate of .39#/SHP/hr

$$\text{Cost} = \frac{.39}{7.25} \times .145 \times \text{SHP} \times h_o$$

$$\text{Cost} = \$.0078 \times \text{SHP} \times h_o$$

Gas Turbine Power Diesel Oil @ 14-1/2¢/gal.

Consumption based upon a rate of .60#/SHP/hr

$$\text{Cost} = \frac{.60}{7.25} \times .145 \times \text{SHP} \times h_o$$

$$\text{Cost} = \$.012 \times \text{SHP} \times h_o$$

8. Financing (Payment to Principal and Interest)

A. Based upon amortizing 20 year bonds bearing 8-3/4% interest with monthly straight line payments to principal and interest.

$$\text{Annual Expense} = .1060453 \times V$$

$$\text{Cost/hr (5082 hr/yr)} = 2.0867 \times V \times 10^{-5}$$

$$\text{Cost/hr (3847 hr/yr)} = 2.7563 \times V \times 10^{-5}$$

B. Based upon amortizing 20 year bonds bearing 7.0% interest with monthly straight line payments to principal and interest.

$$\text{Annual Expense} = .093036 \times V$$

$$\text{Cost/hr (5082 hr/yr)} = 1.8307 \times V \times 10^{-5}$$

$$\text{Cost/hr (3847 hr/yr)} = 2.4184 \times V \times 10^{-5}$$

## 1. Wages and Allowances (Analysis)

### A. VESSELS UNDER 100 GROSS TONS AND OVER 1,000 SHP

#### (1) UNION AGREEMENTS

(a) Operators are members of the Marine Engineers Beneficial Association.

(b) Deckhands are members of the Inlandboatmen's Union of the Pacific.

#### (2) OPERATING PLAN A-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated 360 days per year. Weekdays we have considered operating each vessel 16 hours per day with two crews each working an eight-hour shift. Weekends and holidays each vessel will be operated 10 hours per day by a third or "relief crew." We have allowed for a two-week vacation per year per man and 9 paid holidays. It is to be recognized that by operating more than one vessel certain crew interchangeability in manning can be effected which would be to the advantage of the proposed ferry system. Wage levels used are for the year 1972.

Manning/Crew:	Cost/Year
2 Operators @ \$1,200/month	\$28,800
1 Class I Deckhand @ \$875/month	10,500
3 Class II Deckhands @ \$850/month	30,600
<u>6</u> Basic Annual Wages	<u>\$69,900</u>
Overtime @ 10%	6,990
Annual Wages/Crew	\$76,890

#### Operation:

Basic Crew 40 hrs/week x 50 weeks = 2,000 hrs

Vessel operates as follows:

Weekdays 247 days @ 16 hrs 3,952 hrs

Weekends 104 days @ 10 hrs 1,040 hrs

Holidays 9 days @ 10 hrs 90 hrs

360 days 5,082 hrs/year

\$76,890 = \$38.45/hr -or- \$1,538/40-hr week  
2,000 hrs

Wages:

Basic Annual Wage "Regular Crew"			
2 x \$76,890			\$153,780
Basic Annual Wage "Relief Crew"			
Weekends:			
Straight Time			
104 days x 8 hrs @ \$38.45/hr	\$31,990		
Overtime			
104 days x 2 hrs @ \$57.675/hr		11,996	
			\$43,986
Holidays: (Overtime)			
9 days x 10 hrs @ \$57.675/hr		5,191	49,177
Total Annual Crew Wages . . . . .			\$202,957

Allowances:

As the "relief crew" works a sufficient number of hours to entitle it to the full benefit of all allowances we have considered 3 full crews per vessel or a total of 18 men receiving the following benefits:

Health & Welfare			
\$100/month/man	\$21,600		
Pension			
\$45/month/man	9,720		
Uniform Allowance			
\$110/year/man	1,980		
Vacation			
3 crews @ 2 weeks/crew			
3 x 2 x \$1,538/week		9,228	42,528

Payroll Taxes:

F.I.C.A.			
5.0% x 18 x \$7,800	\$ 7,020		
Unemployment (Calif. State)			
3.5% x 18 x \$3,800		2,394	9,414
<u>TOTAL ANNUAL CREW COSTS (Plan A-1) . . .</u>			<u>\$254,899</u>

Average Hourly Cost:

\$254,899 = \$50.16/hour  
5,082 hrs

A. VESSELS UNDER 100 GROSS TONS AND OVER 1,000 SHP (contd.)

(3) OPERATING PLAN A-2 (3,847 hr/yr)

In the following computation it is assumed that each vessel will be operated 360 days per year; however, wages are based on 52 weeks or 364 days/year. Weekdays we have considered operating each vessel 11 hours per day with one crew and weekends we have considered operating each vessel 10 hours per day with the same crew. It is proposed under this arrangement that each vessel could have two crews alternating between a week-on and a week-off. Each crew would work 7 days per week and would be paid 8 hours straight time plus the corresponding overtime depending whether it is weekday or weekend service.

The nine paid holidays have been computed at 10 hours plus 10% O.T. allowance or an equivalent of 11 hours per day at overtime rates. We have allowed for a two-week vacation per year per man. The published hourly rates are based upon a 52-week working year. These computations have been corrected to allow for the two-week vacation expense.

Basic Annual Wage: Crew "A" and "B"

Manning/Crew: (Hourly Rates)	Crew	
Straight Time	Cost/Hour	
2 Operators @ \$6.94	\$13.88	
1 Class I Deckhand @ \$5.06	5.06	
3 Class II Deckhands @ \$4.91	<u>14.73</u>	
<u>6</u>	<u>\$33.67/hr</u>	
Overtime:		
2 Operators @ \$10.41	\$20.82	
1 Class I Deckhand @ \$7.59	7.59	
3 Class II Deckhands @ \$7.365	<u>22.10</u>	
<u>6</u>	<u>\$50.51/hr</u>	
Weekdays:		
8 hrs @ \$33.67	\$269.36	Crew
3 hrs @ \$50.51	<u>151.53</u>	Cost/Week
<u>11</u> 5 days @	<u>\$420.89</u>	<u>\$2,104.45</u>
Weekends:		
8 hrs @ \$33.67	\$269.36	
2 hrs @ \$50.51	<u>101.02</u>	
<u>10</u> 2 days	<u>\$370.38</u>	<u>740.76</u>
Weekly Wages/Operating Crew. . . . .		\$2,845.21

Operation:

Each crew -- week-on and week-off

Vessel operates as follows:

Weekdays	247 days @ 11 hrs	2,717
Weekends 52 x 2	104 days @ 10 hrs	1,040
Holidays	9 days @ 10 hrs	90
	360 days	<u>3,847 hrs/year</u>

Wages:

52 x \$2,845.21	\$147,951
+ 10% overtime	<u>14,795</u>

Total Annual Crew Wages . . . . . \$162,746

Holidays:

Holidays worked are based upon 10 hours plus 10% O.T. allowance which is equivalent to 11 hours at overtime rates. As this affects only the 8 hours of straight time for the working crew, add the following:

\$50.51 - \$33.67 = \$16.84 x 8 hrs x 9 days \$ 1,213

For the crew off-duty, add the following:

\$33.67 x 8 hrs x 9 days	<u>2,425</u>	3,638
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Allowances:

Basically there are two or a total of 12 men/vessel operating under this plan who share the following benefits:

Health & Welfare		
\$100/month/man	\$14,400	
Pension		
\$45/month/man	6,480	
Uniform Allowance		
\$110/year/man	1,320	
Vacation		
2 crews @ 2 weeks/crew		
2 x 2 x \$2,845.21	<u>11,381</u>	33,581

Payroll Taxes:

F.I.C.A.		
5.0% x 12 x \$7,800	\$ 4,680	
Unemployment (Calif. State)		
3.5% x 12 x \$3,800	<u>1,596</u>	<u>6,276</u>

TOTAL ANNUAL CREW COSTS (Plan A-2) \$ 206,241

Average Hourly Cost:

\$206,241 = \$53.61/hour  
3,847 hrs

B. ADVANCED SYSTEMS CRAFT --

35 KNOT SPEED UNDER 100 GROSS TONS AND OVER 1,000 SHP

(1) UNION AGREEMENTS

(a) Operators are members of the Marine Engineers Beneficial Association.

(b) Deckhands are members of the Inlandboatmen's Union of the Pacific.

(2) OPERATING PLAN B-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-1. A 10% allowance has been added to the standard wage rates to compensate for high-speed operation.

Manning/Crew:	Cost/Year
2 Operators @ \$1,320/month	\$31,680
1 Class I Deckhand @ \$963/month	11,556
<u>3 Class II Deckhands @ \$935/month</u>	<u>33,660</u>
Basic Annual Wages	\$76,896
Overtime @ 10%	<u>7,690</u>
Annual Wages/Crew	\$84,586

Operation:

Basic Crew 40 hrs/week x 50 weeks = 2,000 hrs

Vessel operates as follows:

Weekdays 247 days @ 16 hrs	3,952 hrs
Weekends 104 days @ 10 hrs	1,040 hrs
Holidays 9 days @ 10 hrs	90 hrs
360	= 5,082 hrs/year

\$84,586 = \$42.30/hr-or- \$1,692/40-hr week  
2,000 hrs

Wages:

Basic Annual Wage "Regular Crew"			
2 x \$84, 586			\$169, 172
Basic Annual Wage "Relief Crew"			
Weekends:			
Straight time			
104 days x 8 hrs @ \$42.30/hr	\$35, 194		
Overtime			
104 days x 2 hrs @ \$63.45/hr	<u>13, 198</u>		
	\$48, 392		
Holidays: (Overtime)			
9 days x 10 hrs @ \$63.45/hr	<u>5, 711</u>		<u>54, 103</u>
<u>Total Annual Crew Wages</u>	.. . . . .		\$223, 275

Allowances:

Similar to that described under Operating Plan A-1:

Health & Welfare		
\$100/month/man		\$21, 600
Pension		
\$45/month/man		9, 720
Uniform Allowance		
\$110/year/man		1, 980
Vacation		
3 crews @ 2 weeks/crew		
3 x 2 x \$1, 692/week	<u>10, 152</u>	
		42, 452

Payroll Taxes:

F.I.C.A.		
5.0% x 18 x \$7, 800		\$ 7, 020
Unemployment (Calif. State)		
3.5% x 18 x \$3, 800		<u>2, 394</u>
		<u>9, 414</u>

TOTAL ANNUAL CREW COSTS (Plan B-1) . . \$276, 141

Average Hourly Cost:

\$276, 141 = \$53.34/hour  
5, 082

B. ADVANCED SYSTEMS CRAFT -- 35 KNOT SPEED  
UNDER 100 GROSS TONS AND OVER 1,000 SHP (contd.)

(3) OPERATING PLAN B-2 (3,847 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-2.

A 10% allowance has been added to the standard wage rates to compensate for high-speed operation.

Basic Annual Wage: Crew "A" and "B"

Manning /Crew: (Hourly Rates)

Crew

Straight Time:

Cost/Hour

2 Operators @ \$7.63	\$15.26
1 Class I Deckhand @ \$5.57	5.57
3 Class II Deckhands @ \$5.40	<u>16.20</u>
<u>6</u>	\$37.03/hr

Overtime:

2 Operators @ \$11.45	\$22.90
1 Class I Deckhand @ \$8.35	8.35
3 Class II Deckhands @ \$8.10	<u>24.30</u>
<u>6</u>	\$55.55/hr

Weekdays:

8 hrs @ \$37.03	\$296.24	Crew
<u>3 hrs @ \$55.55</u>	<u>166.65</u>	Cost/Week
<u>11 hrs</u>	<u>5 days @</u>	<u>\$462.89</u> = <u>\$2,314.45</u>

Weekends:

8 hrs @ \$37.03	\$296.24	
<u>2 hrs @ \$55.55</u>	<u>111.10</u>	
<u>10 hrs</u>	<u>2 days @</u>	<u>\$407.34</u> = <u>814.68</u>

Weekly Wages/Operating Crew. . . . . \$3,129.13

Operation:

Each crew -- Week-on Week-off

Vessel operates as follows:

Weekdays	247 days @ 11 hrs	2,717
Weekends 52 x 2	104 days @ 10 hrs	1,040
Holidays	9 days @ 10 hrs	90
	<u>360</u>	<u>3,847 hrs/yr</u>

Wages:

52 x \$3,129.13	\$162,715
+ 10% overtime	<u>16,272</u>

Total Annual Crew Wages . . . . . \$178,987

Holidays:

Holidays worked are based upon 10 hours plus 10% O. T. allowance which is equivalent to 11 hours at overtime rates. As this affects only the 8 hours of straight time for the working crew, add the following:

· \$55.55 - \$37.03 = \$18.52 x 8 hrs x 9 days \$1,334

For the crew off duty, add the following:

\$37.03 x 8 hrs x 9 days	<u>2.666</u>	4,000
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Allowances:

Basically there are two crews of 6 men each with a total of 12 men/vessel operation under this plan who share the following benefits:

Health & Welfare	
\$100/month/man	\$14,400
Pension	
\$45/month/man	6.480
Uniform Allowance	
\$110/year/man	1,320
Vacation	
2 crews @ 2 weeks/crew	
2 x 2 x \$3,129.13	<u>12,517</u>
	34,717

Payroll Taxes:

F. I. C. A.	
5.0% x 12 x \$7,800	\$ 4,680
Unemployment (Calif. State)	
3.5% x 12 x \$3,800	<u>1,596</u>
	<u>6,276</u>

TOTAL ANNUAL CREW COSTS (Plan B-2) . . . . . \$223,980

Average Hourly Cost:

\$223,980 = \$58.22/hour  
3,847 hrs.

C. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP  
CARRYING LESS THAN 1,000 PASSENGERS

(1) UNION AGREEMENTS

- (a) Master with pilotage and radar endorsement is a member of the Masters Mates and Pilots Union.
- (b) Engineer is a member of the Marine Engineers Beneficial Association.
- (c) Able-bodied and ordinary seamen are members of the Inlandboatmen's Union of the Pacific.

(2) OPERATING PLAN C-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-1.

Manning/Crew:

	Cost/Year
1 Master/Pilot @ \$1,538/month	\$18,456
1 Engineer @ \$1,200/month	14,400
3 A. B. Seamen @ \$980/month	35,280
1 Ord. Seaman @ \$900/month	10,800
<u>6</u> Basic Annual Wages	<u>\$78,936</u>
Overtime @ 10%	7,894
Annual Wages/Crew	\$86,830

Operation:

Basic Crew 40 hrs/week x 50 weeks = 2,000 hrs

Vessel operates as follows:

Weekdays 247 days @ 16 hrs	3,952 hrs
Weekends 104 days @ 10 hrs	1,040 hrs
Holidays 9 days @ 10 hrs	90 hrs
<u>360</u> days	<u>5,082</u> hrs/year

\$86,830 = \$43.42/hr -or- \$1,736.60/40 hr wk  
2,000 hrs

Wages:

Basic Annual Wage "Regular Crew"  
2 x \$86,830 \$173,660

Basic Annual Wage "Relief Crew"

Weekends:

Straight time

104 days x 8 hrs @ \$43.42/hr \$36,125

Overtime

104 days x 2 hrs @ \$65.13/hr 13,547  
\$49,672

Holidays: (Overtime)

9 days x 10 hrs @ \$65.13/hr 5,862 55,534

Total Annual Crew Wages . . . . . \$229,194

Allowances:

Similar to that described under Operating Plan A-2.

Health & Welfare

\$100/month/man \$21,600

Pension

\$45/month/man 9,720

Uniform Allowance

\$110/year/man 1,980

Vacation

2 weeks/crew x 3 crews

2 x 3 x \$1,736.60 10,420

43,720

Payroll Taxes:

F.I.C.A.

5.0% x 18 x \$7,800 \$ 7,020

Unemployment (Calif. State)

3.5% x 18 x \$3,800 2,394

9,414

TOTAL ANNUAL CREW COSTS (Plan C-1) . . \$282,328

Average Hourly Cost:

\$282,328 = \$55.55/hour  
5,082 hrs

C. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP  
CARRYING LESS THAN 1,000 PASSENGERS (cont'd)

(3) OPERATING PLAN C-2 (3,847 hr/yr)

In the following computation it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-2.

Basic Annual Wage: Crew "A" and "B"

Manning/Crew: (Hourly Rates)

Straight Time:

	Crew
	Cost/Hour
1 Master/Pilot @ \$8.88	\$ 8.88
1 Engineer @ \$6.94	6.94
3 A.B. Seamen @ \$5.66	16.98
1 Ord. Seaman @ \$5.20	5.20
<u>6</u>	<u>\$ 38.00/hour</u>

Overtime:

1 Master/Pilot @ \$13.31	\$ 13.31
1 Engineer @ \$10.41	10.41
3 A.B. Seamen @ \$ 8.49	25.47
1 Ord. Seaman @ \$ 7.80	7.80
<u>6</u>	<u>\$ 56.99/hour</u>

Weekdays:

8 hrs @ \$38.00	\$304.00	Crew
<u>3 hrs @ \$56.99</u>	<u>171.00</u>	Cost/Week
<u>11</u>	<u>5 days @</u>	<u>\$475.00 = \$2,375.00</u>

Weekends:

8 hrs @ \$38.00	\$304.00	
<u>2 hrs @ \$56.99</u>	<u>114.00</u>	
<u>10</u>	<u>2 days @</u>	<u>\$418.00 = 836.00</u>

Weekly Wages/Operating Crew . . . . . \$3,211.00

Operation:

Each crew -- week-on week-off

Vessel operates as follows:

Weekdays 247 days @ 11 hrs	2,717
Weekends 104 days @ 10 hrs	1,040
Holidays 9 days @ 10 hrs	90
<u>360 days</u>	<u>3,847 hrs/yr</u>

Wages:

52 x \$3,211	\$166,972
+ 10% overtime	<u>16,697</u>

Total Annual Crew Wages . . . . . \$183,669

Holidays:

Holidays worked are based upon 10 hours plus 10% O.T. allowance which is equivalent to 11 hours at overtime rates. As this affects only the 8 hours of straight time for the working crew, add the following:

\$56.99 - \$38.00 = \$18.99 x 8 hrs x 9 days \$1,368

For the crew off-duty, add the following:

\$38.00 x 8 hrs x 9 days	<u>2,736</u>
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4,104

Allowances:

Basically there are two crews of 6 men each or a total of 12 men/vessel operating under this plan who should share the following benefits:

Health & Welfare

\$100/month/man	\$ 14,400
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Pension

\$45/month/man	6,480
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Uniform Allowance

\$110/year/man	1,320
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Vacation

2 crews @ 2 weeks/crew

2 x 2 x \$3,211	<u>12,844</u>
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35,044

Payroll Taxes:

F.I.C.A.

5.0% x 12 x \$7,800	\$ 4,680
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Unemployment (Calif. State)

3.5% x 12 x \$3,800	<u>1,596</u>	<u>6,276</u>
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TOTAL ANNUAL CREW COSTS (Plan C-2) . . . \$229,093

D. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP  
CARRYING MORE THAN 1,000 PASSENGERS

(1) UNION AGREEMENTS

- (a) Master with Pilotage & radar endorsement is a member of the Masters Mates and Pilots Union.
- (b) Engineer is a member of the Marine Engineers Beneficial Association.
- (c) Able-bodied and ordinary seamen are member of the Inlandboatmen's Union of the Pacific.

(2) OPERATING PLAN D-1 (5,082 hr/yr)

In the following computations it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-1.

Manning/Crew:	Cost/Year
1 Master/Pilot @ \$1,538/month	\$18,456
1 Engineer @ \$1,200/month	14,400
4 A.B. Seamen @ \$980/month	47,040
2 Ord. Seamen @ \$900/month	<u>21,600</u>
<u>8</u>	<u>Basic Annual Wages</u> <u>\$101,496</u>
	Overtime @ 10% <u>10,150</u>
	<u>Annual Wages/Crew</u> <u>\$111,646</u>

Operation:

$$\text{Basic Crew 40 hrs/week} \times 50 \text{ weeks} = 2,000 \text{ hrs}$$

Vessel operates as follows:

Weekdays	247 days @ 16 hours	3,952 hrs
Weekends	104 days @ 10 hours	1,040 hrs
Holidays	9 days @ 10 hours	90 hrs
	<u>360 days</u>	<u>= 5,082 hrs/year</u>

$$\frac{\$111,646}{2,000 \text{ hrs}} = \$55.82/\text{hr} \text{ -or- } \$2,233/40\text{hr week}$$

**Wages:**

Basic Annual Wage "Regular Crew"		
2 x \$111,646		\$223,292
Basic Annual Wage "Relief Crew"		
Weekends:		
Straight Time		
104 days x 8 hrs @ \$55.82/hr	\$46,442	
Overtime		
104 days x 2 hrs @ \$83.74/hr	<u>17,418</u>	
	\$63,860	
Holidays: (Overtime)		
9 days x 10 hrs @ \$83.74/hr	<u>7,537</u>	<u>71,397</u>
Total Annual Crew Wages. . . . .		\$294,689

**Allowances:**

As the "relief crew" works a sufficient number of hours to entitle it to the full benefit of all allowances we have considered 3 full crews per vessel or a total of 24 men receiving the following benefits:

Health & Welfare		
\$100/month/man		\$28,800
Pension		
\$45/month/man		12,960
Uniform Allowance		
\$110/month/man		2,640
Vacation		
2 weeks/crew x 3 crews		
2 x 3 x \$2,233	<u>13,398</u>	
		57,798

**Payroll Taxes:**

F.I.C.A.		
5.0% x 24 x \$7,800		\$ 9,360
Unemployment (Calif. State)		
3.5% x 24 x \$3,800	<u>3,192</u>	<u>12,552</u>

**TOTAL ANNUAL CREW COSTS (Plan D-1) . . \$365,039**

**Average Hourly Cost:**

$$\frac{\$365,039}{5,082 \text{ hrs}} = \$71.83/\text{hour}$$

D. VESSELS OVER 100 GROSS TONS AND OVER 1,000 SHP  
CARRYING MORE THAN 1,000 PASSENGERS (cont'd)

(3) OPERATING PLAN D-2 (3,847 hr/yr)

In the following computation it is assumed that each vessel will be operated in a similar manner to that described under Operating Plan A-2.

Basic Annual Wage: Crew "A" and "B"

Manning/Crew: (Hourly Rate)

Straight Time:

	Crew
	Cost/Hour
1 Master/Pilot @ \$8.88	\$ 8.88
1 Engineer @ \$6.94	6.94
4 A.B. Seamen @ \$5.66	22.64
2 Ord. Seamen @ \$5.20	10.40
<u>8</u>	<u>\$ 48.86/hour</u>

Overtime:

1 Master/Pilot @ \$13.31	\$ 13.31
1 Engineer @ \$10.41	10.41
4 A.B. Seamen @ \$ 8.49	33.96
2 Ord. Seamen @ \$ 7.80	15.60
<u>8</u>	<u>\$ 73.28/hour</u>

Weekdays:

8 hrs @ \$48.86	\$390.88	Crew
<u>3 hrs @ \$73.28</u>	<u>219.84</u>	Cost/Week
<u>11</u>	<u>5 days @</u>	<u>\$610.72 = \$3,054.00</u>

Weekends:

8 hrs @ \$48.86	\$390.88	
<u>2 hrs @ \$73.28</u>	<u>146.56</u>	
<u>10</u>	<u>2 days @</u>	<u>\$537.44 = 1,075.00</u>

Weekly Wages/Operating Crew . . . . . \$4,129.00

Operation:

Each crew -- week-on week-off

Vessel operates as follows:

Weekdays 247 days @ 11 hrs	2,717
Weekends 104 days @ 10 hrs	1,040
Holidays <u>9 days @ 10 hrs</u>	<u>90</u>
<u>360 days</u>	<u>3,847 hrs/year</u>

Wages:

52 x \$4,129	\$214,708
+10% Overtime	<u>21,471</u>

Total Annual Crew Wages . . . . . \$236,179

Holidays:

Holidays worked are based upon 10 hours plus 10% O.T. allowance which is equivalent to 11 hours at overtime rates. As this affects only 8 hours of straight time for the working crew, add the following:

\$73.28 - \$48.86 = \$24.42 x 8 hrs x 9 days \$ 1,759

For the crew off-duty, add the following:

\$48.86 x 8 hrs x 9 days	<u>3,518</u>	5,277
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Allowances:

Basically there are two crews of 8 men each or a total of 16 men/vessel operating under this plan who should share the following benefits:

Health & Welfare

\$100/month/man	\$ 19,200
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Pension

\$45/month/man	8,640
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Uniform Allowance

\$110/year/man	1,760
----------------	-------

Vacation

2 crews @ 2 weeks/crew

2 x 2 x \$4,129	<u>16,516</u>
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46,116

Payroll Taxes:

F.I.C.A.

5.0% x 16 x \$7,800	\$ 6,240
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Unemployment (Calif. State)

3.5% x 16 x \$3,800	<u>2,128</u>
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8,368

TOTAL ANNUAL CREW COSTS (Plan D-2) . . \$295,940

Average Hourly Cost:

\$295,940  
3,847 hrs = \$76.93/hour



## SECTION II

### II. OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

1. M. V. Golden Gate
2. M. V. Hawaii State
3. Blount 500
4. Halter 500
5. Blount 624
6. Spaulding 209
7. G. T. Avalon
8. Spaulding 165
9. Hydro-Ski Ferry
10. Hydrodyne Commuter
11. Boeing 929 Hydrofoil



OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

M. V. GOLDEN GATE  
SAN DIEGO MARINE CONSTRUCTION CO.

L = 113.58'  
B = 30.73'  
D = 25.0'  
N = 440 (582 Total)  
SHP = 1100 (D)

V = \$700,000  
 $C_N = \frac{113.58 \times 30.73 \times 25}{100} = 870$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$50.16	\$53.61
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (D) (Included in Hourly Underway Costs) Engine Stores $\$0.71 \times 1100$	\$1,480	\$1,480		
	780	2,260	780	2,260
3. <u>Other Vessel Expense</u> $C_N \times \$2.58$	2,240	2,240	.44	.58
4. <u>Maintenance &amp; Repair</u> Diesel Engines (Included in Hourly Underway Costs) Drydock Painting & Hull Maintenance (Steel Hull) $C_N \times \$5.22$ Passenger Spaces $N \times \$10.90$	\$4,540	\$4,540	1.84	2.43
	4,800	9,340	4,800	9,340
5. <u>Insurance</u> Hull & Machinery .04 x V P/I .01 x V	\$28,000	\$28,000	6.89	9.10
	7,000	35,000	7,000	35,000
6. <u>Fuel Oil Auxiliaries</u> $\$.0011 \times 440 \times \text{hr}$	2,460	1,865	.49	.49
A. TOTAL FIXED OPERATING COST . . . . .	<u>\$306,199</u>	<u>\$256,946</u>		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .			<u>\$60.26/hr</u>	<u>\$66.79/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour - at Terminal (B)	\$60.26	\$66.79
2. <u>Stores, Supplies &amp; Equipment</u> Lube Oil (D) $\$.00024 \times 1100$	.27	.27
4. <u>Maintenance &amp; Repair</u> Diesel Engines $\$.0010 \times 1100$	1.10	1.10
7. <u>Fuel Oil Underway</u> (Diesel Power) $\$.0078 \times 1100$	8.58	8.58
C. AVERAGE COST/HOUR UNDERWAY . . . . .	<u>\$70.21/hr</u>	<u>\$76.74/hr</u>
8. <u>Financing</u> $\$700,000 @ 8-3/4\% \text{ for 20 years Cost/hr}$	<u>\$14.60</u>	<u>\$19.29</u>
Average Cost/Hour at Terminal (B)	\$60.26	\$66.79
Financing (8)	14.60	19.29
D. AVERAGE COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL . . . . .	<u>\$74.86/hr</u>	<u>\$86.08/hr</u>
Average Cost/Hour - Underway (C)	\$70.21	\$76.74
Financing (8)	14.60	19.29
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - UNDERWAY . . .	<u>\$84.81/hr</u>	<u>\$96.03/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

M. V. HAWAII STATE  
BLOUNT MARINE CORPORATION

L = 128.0'  
B = 27.0'  
D = 24.0'  
N = 500  
SHP = 1450

$$C_N = \frac{128 \times 27 \times 24}{100} = 830'$$

V = Published Cost	\$480,000
Modified for SFO Bay	140,000
	\$620,000
+ 10%	62,000
	<u><u>\$682,000</u></u>

	COST / YEAR		COST / HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$50.16	\$53.61
2. <u>Stores, Supplies &amp; Equipment</u>				
Deck Stores $C_N \times \$1.70$	\$1,410	\$1,410		
Lube Oil (D) (Included in Hourly Underway Costs)				
Engine Stores $\$0.71 \times 1450$	<u>1,030</u>	2,440	<u>1,030</u>	2,440
	.48	.63		
3. <u>Other Vessel Expenses</u>				
$C_N \times \$2.58$		2,140	2,140	.42
				.56
4. <u>Maintenance &amp; Repair</u>				
Diesel Engines (Included in Hourly Underway Costs)				
Drydock Painting & Hull Maintenance (Steel Hull)				
$C_N \times \$5.22$	\$4,330	\$4,330		
Passenger Spaces $N \times \$10.90$	<u>5,450</u>	9,780	<u>5,450</u>	9,780
	1.93	2.54		
5. <u>Insurance</u>				
Hull & Machinery $.04 \times V$	\$27,300	\$27,300		
P/I $.01 \times V$	<u>6,820</u>	34,120	<u>6,820</u>	34,120
	6.71	8.87		
6. <u>Fuel Oil Auxiliaries</u>				
$.0011 \times N \times hr$		2,800	2,120	.55
				.55
A. TOTAL FIXED OPERATING COST . . . . .	<u>\$306,179</u>	. . . . .	<u>\$256,841</u>	
B. AVERAGE COST/HOUR - AT TERMINAL			\$60.25/hr	\$66.76/hr
 ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour - at Terminal (B)			\$60.25	\$66.76
2. <u>Stores, Supplies &amp; Equipment</u>				
Lube Oil (D) $\$.00024 \times 1450/\text{hr}$			.35	.35
4. <u>Maintenance &amp; Repair</u>				
Diesel Engines $“.0010 \times 1450/\text{hr}$			1.45	1.45
7. <u>Fuel Oil Underway</u>				
(Diesel Power) $“.0078 \times 1450/\text{hr}$			11.30	11.30
C. AVERAGE COST/HOUR - UNDERWAY . . . . .			<u>\$73.35/hr</u>	<u>\$79.86/hr</u>
8. <u>Financing</u>				
\$682,000 @ 8-3/4% for 20 years Cost/hr			<u>\$14.23</u>	<u>\$18.79</u>
Average Cost/Hour at Terminal (B)			\$60.25	\$66.76
Financing (8)			<u>14.23</u>	<u>18.79</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL.			<u>\$74.48/hr</u>	<u>\$85.55/hr</u>
Average Cost/Hour Underway			\$73.35	\$79.86
Financing (8)			<u>14.23</u>	<u>18.79</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDER WAY. .			<u>\$87.58/hr</u>	<u>\$98.65/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

COMMUTER BOAT - 500  
BLOUNT MARINE CORPORATION

L = 160.5'  
B = 28.0'  
D = 13.3'  
N = 500  
SHP = 2540 (D)

$$V = \$750,000 + 10\% = \$825,000$$

$$C_N = \frac{160.5 \times 28 \times 13.3}{100} = 597$$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$50.16	\$53.61
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (D) (Included in Hourly Underway Costs) Engine Stores $\$0.71 \times 2540$	\$1,012	\$1,012		
	1,800	2,812	1,800	2,812
3. <u>Other Vessel Expenses</u> $C_N \times \$2.58$	1,540	1,540	.31	.40
4. <u>Maintenance &amp; Repair</u> Diesel Engine (Included in Hourly Underway Costs) Drydock Painting & Hull Maintenance (Steel Hull) $C_N \times \$5.22$ Passenger Spaces $N \times \$10.90$	\$3,110	\$3,110	1.68	2.23
	5,450	8,560	5,450	8,560
5. <u>Insurance</u> Hull & Machinery $.04 \times V$ P/I $.01 \times V$	\$33,000	\$33,000	8.12	10.73
	8,250	41,250	8,250	41,250
6. <u>Fuel Oil Auxiliaries</u> $.\$0.0011 \times N \times hr$	2,800	2,115	.55	.55
A. TOTAL FIXED OPERATING COST . . . . .	<u>\$311,861</u>	<u>\$262,518</u>		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .			<u>\$61.37/hr</u>	<u>\$68.25/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour at Terminal (B)	\$61.37	\$68.25
2. <u>Stores, Supplies &amp; Equipment</u> Lube Oil (D) $.\$0.00024 \times 2540/hr$	.61	.61
4. <u>Maintenance &amp; Repair</u> Diesel Engines $.\$0.0010 \times 2540/hr$	2.54	2.54
7. <u>Fuel Oil Underway</u> (Diesel Power) $.\$0.0078 \times 2540/hr$	19.80	19.80
C. AVERAGE COST/HOUR UNDERWAY . . . . .	<u>\$84.32/hr</u>	<u>\$91.20/hr</u>
8. <u>Financing</u> $.\$825,000 @ 8-3/4\% \text{ for } 20 \text{ yrs Cost/hr}$	<u>\$17.21</u>	<u>\$22.74</u>
Average Cost/Hour at Terminal (B)	\$61.37	\$68.25
Financing (8)	<u>17.21</u>	<u>22.74</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL.	<u>.\\$78.58/hr</u>	<u>.\\$90.99/hr</u>
Average Cost/Hour Underway (C)	\$84.32	\$91.20
Financing (8)	<u>17.21</u>	<u>22.74</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .	<u>.\\$101.53/hr</u>	<u>.\\$113.94/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

HALTER - 500  
HALTER MARINE SERVICES

L = 162.5'  
B = 29.0'  
D = 25.0'  
N = 471 (506 Total)  
SHP = 3900 (D)

V = \$1,500,000 + 10% = \$1,650,000

$C_N = \frac{162.5 \times 29 \times 25}{100} = 1,180$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$ 50.16	\$ 53.61
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (D) (Included in Hourly Underway Costs) Engine Stores $\$0.71 \times 3900$	\$2,010	\$2,010		
	<u>2,770</u>	<u>4,780</u>	<u>2,770</u>	<u>4,780</u>
3. <u>Other Vessel Expenses</u> $C_N \times \$2.58$	3,050	3,050	.60	.80
4. <u>Maintenance &amp; Repair</u> Diesel Engine (Included in Hourly Underway Costs) Drydock, Painting & Hull Maintenance (Aluminum Hull) $C_N \times \$9.90$ Passenger Spaces $N \times \$10.90$	\$11,700	\$11,700	3.39	4.47
	<u>5,510</u>	<u>17,210</u>	<u>5,510</u>	<u>17,210</u>
5. <u>Insurance</u> Hull & Machinery .04 x V P/I .01 x V	\$66,000	\$66,000	16.23	21.45
	<u>16,500</u>	<u>82,500</u>	<u>16,500</u>	<u>82,500</u>
6. <u>Fuel Oil Auxiliaries</u> $\$0.0011 \times N \times hr$	2,840	2,150	.56	.56
A. TOTAL FIXED OPERATING COST . . . . .	<u>\$365,279</u>	<u>\$315,931</u>		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .			<u>\$ 71.88/hr</u>	<u>\$ 82.13/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour - at Terminal (B)	\$ 71.88	\$ 82.13
2. <u>Stores, Supplies &amp; Equipment</u> Lube Oil (D) $\$0.00024 \times 3900/hr$	.94	.94
4. <u>Maintenance &amp; Repair</u> Diesel Engines $\$0.0010 \times 3900/hr$	3.90	3.90
7. <u>Fuel Oil Underway</u> (Diesel Power) $\$0.0078 \times 3900/hr$	30.42	30.42
C. AVERAGE COST/HOUR - UNDERWAY . . . . .	<u>\$107.14/hr</u>	<u>\$117.39/hr</u>
8. <u>Financing</u> $\$1,650,000 @ 8-3/4\% \text{ for 20 yrs Cost/hr}$	<u>\$ 34.43</u>	<u>\$ 45.48</u>
Average Cost/Hour at Terminal (B)	\$ 71.88	\$ 82.13
Financing (8)	<u>34.43</u>	<u>45.48</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL..	<u>\$106.31/hr</u>	<u>\$127.61/hr</u>
Average Cost/Hour Underway (C)	\$107.14	\$117.39
Financing (8)	<u>34.43</u>	<u>45.48</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .	<u>\$141.57</u>	<u>\$162.87</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

COMMUTER BOAT - 624  
BLOUNT MARINE CORPORATION

L = 185.0'	V = \$925,000 + 10% = \$1,017,500
B = 23.0'	
D = 42.0'	C <sub>N</sub> = $\frac{185 \times 42 \times 23}{100} = 1790$
N = 624	
SHP = 2900 (D)	

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2
1. <u>Wages &amp; Allowance</u> (See Breakdown)	\$282,328	\$229,093	\$ 55.55	\$ 59.55
2. <u>Stores, Supplies &amp; Equipment</u>				
Deck Stores C <sub>N</sub> x \$1.70	\$3,040	\$3,040		
Lube Oil (Included in Hourly Underway Costs)				
Engine Stores \$0.71 x 2900	<u>2,060</u>	5,100	<u>2,060</u>	5,100
				1.01
				1.33
3. <u>Other Vessel Expenses</u>				
C <sub>N</sub> x \$2.58		4,620	4,620	.91
				1.20
4. <u>Maintenance &amp; Repair</u>				
Diesel Engine (Included in Hourly Underway Costs)				
Drydock Painting & Hull Maintenance (Steel Hull)				
C <sub>N</sub> x \$5.22	\$9,340	\$9,340		
Passenger Spaces N x \$10.90	<u>6,800</u>	16,140	<u>6,800</u>	16,140
				3.18
				4.20
5. <u>Insurance</u>				
Hull & Machinery .04 x V	\$40,800	\$40,800		
P/I .01 x V	<u>10,175</u>	50,975	<u>10,175</u>	50,975
				10.03
				13.25
6. <u>Fuel Oil Auxiliaries</u>				
\$.0011 x N x hr		<u>3,490</u>	<u>2,640</u>	<u>.69</u>
				<u>.69</u>
A. TOTAL FIXED OPERATING COST . . . . .	<u>\$362,653</u>	<u>\$308,568</u>		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .			<u>\$ 71.37/hr</u>	<u>\$ 80.22/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour - at Terminal (B)	\$ 71.37	\$ 80.22
2. <u>Stores, Supplies &amp; Equipment</u>		
Lube Oil (D) \$.00024 x 2900/hr	.70	.70
4. <u>Maintenance &amp; Repair</u>		
Diesel Engines \$0.0010 x 2900/hr	2.90	2.90
7. <u>Fuel Oil Underway</u>		
(Diesel Power) \$.00078 x 2900/hr	<u>22.60</u>	<u>22.60</u>
C. AVERAGE COST/HOUR UNDERWAY . . . . .	<u>\$ 97.57</u>	<u>\$106.42</u>
8. <u>Financing</u>		
\$1,017,500 @ 8-3/4% for 20 yrs Cost/hr	<u>\$ 21.23</u>	<u>\$ 28.05</u>
Average Cost/Hour at Terminal (B)	\$ 71.37	\$ 80.22
Financing (8)	<u>21.23</u>	<u>28.05</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL .	<u>\$ 92.60</u>	<u>\$108.27</u>
Average Cost/Hour Underway (C)	\$ 97.57	\$106.42
Financing (8)	<u>21.23</u>	<u>28.05</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .	<u>\$118.80</u>	<u>\$134.47</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

SPAULDING - 209'  
P. F. SPAULDING & ASSOCIATES, DESIGNER

L = 209.5'

B = 38.0'

D = 30.0'

N = 756 (976 Total)

SHP = 5700 (D)

V = \$2,650,000

$C_N = \frac{209.5 \times 38 \times 30}{100} = 2390$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2	5,082 hr/yr Plan C-1	3,847 hr/yr Plan C-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$282,328	\$229,093	\$ 55.55	\$ 59.55
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (Included in Hourly Underway Costs) Engine Stores $\$0.71 \times 5700$	\$4,060	\$4,060		
	5,050	8,110	4,050	8,110
3. <u>Other Vessel Expenses</u> $C_N \times \$2.58$	6,160	6,160	1.21	1.60
4. <u>Maintenance &amp; Repair</u> Diesel Engine (Included in Hourly Underway Costs) Drydock Painting & Hull Maintenance (Steel Hull) $C_N \times \$5.22$ Passenger Spaces $N \times \$10.90$	\$12,450	\$12,450	4.11	5.44
	8,460	20,910	8,460	20,910
5. <u>Insurance</u> Hull & Machinery .04 x V P/I .01 x V	\$106,000	\$106,000	26.07	34.44
	26,500	132,500	26,500	132,500
6. <u>Fuel Oil Auxiliaries</u> $\$0.0011 \times N \times hr$	4,340	3,285	.85	.85
A. TOTAL FIXED OPERATING COST . . . . .	<u>\$454,348</u>	<u>\$400,058</u>		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .			<u>\$ 89.39/hr</u>	<u>\$103.99/hr</u>
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour - at Terminal (B)			\$ 89.39	\$103.99
2. <u>Stores, Supplies &amp; Equipment</u> Lube Oil (D) $\$0.00024 \times 5700/hr$			1.37	1.37
4. <u>Maintenance &amp; Repair</u> Diesel Engines $\$0.0010 \times 5700/hr$			5.70	5.70
7. <u>Fuel Oil Underway</u> (Diesel Power) $\$0.0078 \times 5700/hr$			44.50	44.50
C. AVERAGE COST/HOUR UNDERWAY . . . . .			<u>\$140.96/hr</u>	<u>\$155.56/hr</u>
8. <u>Financing</u> $\$2,650,000 @ 8-3/4\% \text{ for 20 years}$ Cost/hr			<u>\$ 55.30</u>	<u>\$ 73.04</u>
Average Cost/hour at Terminal (B)			\$ 89.39	\$103.99
Financing (8)			<u>55.30</u>	<u>73.04</u>
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - AT TERMINAL			<u>\$144.69/hr</u>	<u>\$177.03/hr</u>
Average Cost/Hour - Underway (C)			\$140.96	\$155.56
Financing (8)			<u>55.30</u>	<u>73.04</u>
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - UNDERWAY . .			<u>\$196.26/hr</u>	<u>\$228.60/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

G. T. AVALON  
MARTINOLICH SHIPBUILDING CORP.

L = 160.0'  
B = 27.0'  
D = 24.0'  
N = 505  
SHP = 5000 (GT)

V = \$2,100,000

$C_N = \frac{160.0 \times 27.0 \times 24.0}{100} = 1035$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2	5,082 hr/yr Plan A-1	3,847 hr/yr Plan A-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$ 50.16	\$ 53.61
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (GT) (Included in Hourly Underway Costs) Engine Stores $\$.25 \times 5000$	\$1,760	\$1,760		
	<u>1,250</u>	<u>3,010</u>	<u>1,250</u>	<u>3,010</u>
3. <u>Other Vessel Expense</u> $C_N \times \$2.58$	2,670	2,670	.53	.70
4. <u>Maintenance &amp; Repair</u> Gas Turbine (Contract) (Included in Hourly Underway Costs) Strut Drive (Contract) (Included in Hourly Underway Costs) Drydocking, Painting & Hull Maintenance (Aluminum Hull) $C_N \times \$9.90$ Passenger Spaces $N \times \$10.90$	\$10,250	\$10,250	3.10	4.10
	<u>5,500</u>	<u>15,750</u>	<u>5,500</u>	<u>15,750</u>
5. <u>Insurance</u> Hull & Machinery .04 x V P/I .01 x V	\$84,000	\$84,000	20.66	27.29
	<u>21,000</u>	<u>105,000</u>	<u>21,000</u>	<u>105,000</u>
6. <u>Fuel Oil Auxiliaries</u> $“.0011 \times N \times hr$	2,820	2,140	.56	.56
A. TOTAL FIXED OPERATING COST . . . . .	<u>\$384,149</u>	<u>\$334,811</u>		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .			<u>\$ 75.60/hr</u>	<u>\$ 87.04/hr</u>

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour - at Terminal (B)	\$ 75.60	\$ 87.04
2. <u>Stores, Supplies &amp; Equipment</u> Lube Oil (GT) $\$.0000416 \times 5000$	.21	.21
4. <u>Maintenance &amp; Repair</u> Gas Turbine (Contract) $.00326 \times 5000$ Strut Drive $.00105 \times 5000$	16.00	16.00
	5.25	5.25
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) $.012 \times 5000/hr$	60.00	60.00
C. AVERAGE COST/HOUR UNDERWAY . . . . .	<u>\$157.06/hr</u>	<u>\$168.50/hr</u>
8. <u>Financing</u> $\$2,100,000 @ 8-3/4\% \text{ for 20 yrs}$ Cost/hr	<u>\$ 43.82</u>	<u>\$ 57.88</u>
Average Cost/Hr at Terminal (B)	\$ 75.60	\$ 87.04
Financing (8)	43.82	57.88
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL .	<u>\$119.42/hr</u>	<u>\$144.92/hr</u>
Average Cost/Hour Underway (C)	\$157.06	\$168.50
Financing (8)	43.82	57.88
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .	<u>\$200.88/hr</u>	<u>\$226.38/hr</u>

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

SPAULDING - 165'  
P. F. SPAULDING & ASSOCIATES, DESIGNER

L = 166.0'  
B = 31.0'  
D = 25.0'  
N = 459 (636 Total)  
SHP = 5000 (GT)

V = \$2,100,000  
 $C_N = \frac{166 \times 31 \times 25}{100} = 1290$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr	3,847 hr/yr	5,082 hr/yr	3,487 hr/yr
	Plan A-1	Plan A-2	Plan A-1	Plan A-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$254,899	\$206,241	\$ 50.16	\$ 53.61
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores $C_N \times \$1.70$ Lube Oil (GT) (Included in Hourly Underway Costs) Engine Stores \$.25 x SHP	\$2,190	\$2,190		
	1,250	3,440	1,250	3,440
3. <u>Other Vessel Expense</u> $C_N \times \$2.58$	3,330	3,330	.66	.87
4. <u>Maintenance &amp; Repair</u> Gas Turbine (Contract) (Included in Hourly Underway Costs) Strut Drive (Contract) (Included in Hourly Underway Costs) Drydecking, Painting & Hull Maintenance (Aluminum Hull) $C_N \times \$9.90$ Passenger Spaces N x \$10.90	\$12,750	\$12,750	3.62	4.78
	5,668	18,418	5,668	18,418
5. <u>Insurance</u> Hull & Machinery .04 x V P/I .01 x V	\$84,000	\$84,000	20.66	27.29
6. <u>Fuel Oil Auxiliaries</u> .0011 x N x hr	2,907	2,200	.57	.57
A. TOTAL FIXED OPERATING COST . . . . .	\$387,994	\$338,629		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .		\$ 76.35/hr	\$ 88.02/hr	

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour - at Terminal (B)	\$ 76.35	\$ 88.02
2. <u>Stores, Supplies &amp; Equipment</u> Lube Oil (GT) \$.0000416 x 5000	.21	.21
4. <u>Maintenance &amp; Repair</u> Gas Turbine (Contract) \$.00326 x 5000 Strut Drive (Contract) \$.00105 x 5000	16.00	16.00
	5.25	5.25
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 5000/hr	60.00	60.00
C. AVERAGE COST/HOUR UNDERWAY . . . . .	\$157.81/hr	\$169.48/hr
8. <u>Financing</u> \$2,100,000 @ 8-3/4% for 20 yrs Cost/hr	\$ 43.82	\$ 57.88
Average Cost/hr at Terminal (B)	\$ 76.35	\$ 88.02
Financing (8)	43.82	57.88
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL. .	\$120.17/hr	\$145.90/hr
Average Cost/Hour Underway (C)	\$157.81	\$169.48
Financing (8)	43.82	57.88
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .	\$201.63/hr	\$227.36/hr

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

HYDRO-SKI FERRY  
HYDRO-SKI INTERNATIONAL CORP.

L = 114.25'  
B = 38.0'  
D = 16.0'  
N = 300  
SHP = 8000

V = \$1,500,000 + 10% = \$1,650,000  
C<sub>N</sub> =  $\frac{114.25 \times 38 \times 16}{100} = 695$

	COST / YEAR		COST / HOUR	
	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$276,141	\$223,980	\$ 54.34	\$ 58.22
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores C <sub>N</sub> x \$1.70 Note: Lube oil and engine stores are included in maintenance of repairs in hourly underway costs.	1,180	1,180	.23	.31
3. <u>Other Vessel Expenses</u> C <sub>N</sub> x \$2.58	1,790	1,790	.35	.47
4. <u>Maintenance &amp; Repair</u> (Aluminum Hull) Gas Turbine (Contract) (Included in Hourly Underway Costs) Hydro Jet Pump (Contract) (Included in Hourly Underway Costs) Misc. Ship Maintenance (Including Drydocking, Hull Repairs, Accommodation Maintenance, Electronics, etc.) Hydro-Ski International	50,820	50,820	10.00	13.21
5. <u>Insurance</u> Hull & Machinery .045 x V      \$74,200 P/I      \$50 x N      15,000      89,200      15,000      89,200      17.55      23.19				
6. <u>Fuel Oil Auxiliaries</u> (Driven off Main Turbines)				
A. <u>TOTAL FIXED OPERATING COSTS</u> . . . . . <u>\$419,131</u> . . . . . <u>\$366,970</u>				
B. <u>AVERAGE COST/HOUR - AT TERMINAL</u> . . . . . <u>\$ 82.47/hr</u> <u>\$ 95.40/hr</u>				
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour - At Terminal (B)			\$ 82.47	\$ 95.40
4. <u>Maintenance &amp; Repair</u> Gas Turbine (Contract) \$.00326 x 8000/hr Jet Pump (Contract) \$.00175 x 8000/hr			26.00	26.00 14.00
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 8000/hr			96.00	96.00
C. <u>AVERAGE COST/HOUR - UNDERWAY</u> . . . . . <u>\$218.47/hr</u> <u>\$231.40/hr</u>				
8. <u>Financing</u> \$1,650,000 @ 8-3/4% for 20 yrs Cost/hr			\$ 34.43	\$ 45.48
Average Cost/Hour at Terminal (B)			\$ 82.47	\$ 95.40
Financing (8)			34.43	45.48
D. <u>AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL</u> . . <u>\$116.90/hr</u> <u>\$140.88/hr</u>				
Average Cost/Hour - Underway (C)			\$218.47	\$231.40
Financing (8)			34.43	45.48
E. <u>AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY</u> <u>\$252.90/hr</u> <u>\$276.88/hr</u>				

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

**HYDRODYNE COMMUTER  
HYDRODYNE MARINE CORPORATION**

L = 112.42'  
B (Hull) = 23.5'  
D = 16.0'  
N = 300  
SHP = 4900 (GT)

V = \$2,000,000 + 10% = \$2,200,000  
C<sub>N</sub> =  $\frac{112.42 \times 23.5 \times 16}{100} = 423$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2
1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$276,141	\$223,980	\$ 54.34	\$ 58.22
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores C <sub>N</sub> x \$1.70 Note: From hydrodyne: Lube Oil and engine stores are included as miscellaneous equipment in hourly underway costs.	720	720	.14	.19
3. <u>Other Vessel Expense</u> (Included with miscellaneous equipment in hourly underway costs.)				
4. <u>Maintenance &amp; Repair</u> (Aluminum Hull) Gas Turbine (Contract) (Included in hourly underway costs) Drive Unit (Contract) (Included in hourly underway costs) Support Equipment (Contract) (Included in hourly underway costs) Misc. ship maintenance including drydocking, hull repairs, accommodation maintenance, etc. (Hydrodyne)	40,000	40,000	7.87	10.40
5. <u>Insurance</u> Hull & Machinery .045 x V \$99,000 P/I \$50. x N <u>15,000</u> 114,000 <u>15,000</u> 114,000 22.43 29.63				
6. <u>Fuel Oil Auxiliaries</u> \$.0011 x N x hr 1,680 1,270 .33 .33				
A. <u>TOTAL FIXED OPERATING COSTS</u> . . . . . <u>\$432,541</u> . . . . . <u>\$379,970</u>				
B. <u>AVERAGE COST/HOUR - AT TERMINAL</u> . . . . . <u>\$ 85.11</u> <u>\$ 98.77</u>				
ADDITIONAL HOURLY COSTS - UNDERWAY:				
Average Cost/Hour - at Terminal (B)			\$ 85.11	\$ 98.77
2. <u>Stores, Supplies &amp; Equipment</u> Miscellaneous equipment from Hydrodyne (\$.00102 x 4900/hr)			5.00	5.00
4. <u>Maintenance &amp; Repair</u> Gas Turbines (Contract) \$.00326 x 4900 Drive Unit (Contract) \$.00306 x 4900 Support Eqt. \$.00184 x 4900			16.00 15.00 9.00	16.00 15.00 9.00
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 4900/hr			58.80	58.80
C. <u>AVERAGE COST/HOUR - UNDERWAY</u> . . . . . <u>\$188.91/hr</u> <u>\$202.57/hr</u>				
8. <u>Financing</u> \$2,200,000 @ 8-3/4% for 20 years Cost/hr			\$ 45.91	\$ 60.64
Average Cost/hour - at Terminal (B)			\$ 85.11	\$ 98.77
Financing (8)			45.91	60.64
D. <u>AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL</u> . . <u>\$131.02/hr</u> <u>\$159.41/hr</u>				
Average Cost/hour - Underway (C)			\$188.91	\$202.57
Financing (8)			45.91	60.64
E. <u>AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL - UNDERWAY</u> . . <u>\$234.82/hr</u> <u>\$263.21/hr</u>				

OPERATING EXPENSE AND FINANCING ANALYSIS PER VESSEL

HYDROFOIL 929-110  
THE BOEING COMPANY

L = 93.0'  
B = 35.0'  
D = 24.0'  
N = 300  
SHP = 4500

V = \$2,750,000 + 10% = \$3,000,000  
 $C_N = \frac{93 \times 35 \times 24}{100} = 780$

	COST/YEAR		COST/HOUR	
	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2	5,082 hr/yr Plan B-1	3,847 hr/yr Plan B-2

1. <u>Wages &amp; Allowances</u> (See Breakdown)	\$276,141	\$223,980	\$ 54.34	\$ 58.22
2. <u>Stores, Supplies &amp; Equipment</u> Deck Stores $C_N \times \$1.70$ Note: Lube oil and engine stores are included as miscellaneous equipment in underway costs.	1,325	1,325	.26	.34
3. <u>Other Vessel Expenses</u> (Included with miscellaneous equipment in underway costs.)				
4. <u>Maintenance &amp; Repair</u> (Aluminum Hull) Boeing Routine Maintenance \$10/day x 360 \$3,600 Pre-Flight Inspection \$5/day x 360 1,800 Gas Turbine (Contract) (Included in hourly underway costs) Hydro Jet Pump (Contract) (Included in hourly underway costs) Misc. ship maintenance including drydocking, hull repairs, accommodation maintenance, electronics, etc. (Boeing)	60,000	65,400	60,000	65,400
	60,000	65,400	60,000	65,400
	12.87	17.00		
5. <u>Insurance</u> Hull & Machinery .045 x V P/I \$50. x N	\$130,000	\$130,000	28.53	37.69
	15,000	145,000	15,000	145,000
6. <u>Fuel Oil Auxiliaries</u> (Driven off Main Turbines)				
A. TOTAL FIXED OPERATING COSTS . . . . .	<u>\$487,866</u>	<u>\$435,705</u>		
B. AVERAGE COST/HOUR - AT TERMINAL . . . . .		<u>\$ 96.00/hr</u>	<u>\$113.25/hr</u>	

ADDITIONAL HOURLY COSTS - UNDERWAY:

Average Cost/Hour at Terminal (B)	\$ 96.00	\$113.25
2. <u>Stores, Supplies &amp; Equipment</u> \$.00102 x 4500/hr	4.60	4.60
4. <u>Maintenance &amp; Repair</u> Gas Turbines (Contract) \$.00326 x 4500/hr Jet Pump (Contract) \$.00175 x 4500/hr	15.00	15.00
7. <u>Fuel Oil Underway</u> (Gas Turbine Power) \$.012 x 4500/hr	7.88	7.88
C. AVERAGE COST/HOUR - UNDERWAY . . . . .	<u>54.00</u>	<u>54.00</u>
8. <u>Financing</u> \$3,000,000 @ 8-3/4% for 20 years Cost/hr	<u>62.60</u>	<u>82.69</u>
Average Cost/hour - at Terminal (B)	\$ 96.00	\$113.25
Financing (8)	62.60	82.69
D. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL AT TERMINAL..	<u>\$158.60</u>	<u>\$195.94</u>
Average Cost/hour Underway	\$177.48	\$194.73
Financing (8)	62.60	82.69
E. AVERAGE OPERATING COST PLUS FINANCING/HOUR/VESSEL UNDERWAY . .	<u>\$240.08</u>	<u>\$277.42</u>



### SECTION III

#### III. BASIS FOR PROJECTED VESSEL OPERATING EXPENSES AND FINANCING COSTS BEYOND 1972

1. SCHEDULE FOR ESCALATION
2. ESCALATION FOR INDIVIDUAL VESSEL CANDIDATES



## SCHEDULE

### ESCALATION RATE

<u>Item</u>	<u>Annual Increase</u>
1. Wages & Allowance	7%
2. Stores Supplies & Equipment	2-1/2%
3. Other Vessel Expenses	2-1/2%
4. Maintenance & Repair	5%
5. Insurance	1%
6. Fuel Oil	1%
7. Fuel Oil Underway	1%
8. Financing	0%
9. Vessel Construction Cost	5%

In order to project the annual increase in operating costs, the foregoing schedule of escalation has been used.

**CORTE MADERA SERVICE  
(REGULAR SERVICE)**

**SPAULDING 165'**

**(5082 Hr. Yr)**

Item	1972 Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average % Annual Escalation	
					DOC	DOC + Fin.
1. Wages & Allowances	254,899	.3453	.2652	7.0	2.417	1.856
2. Stores Supplies & Equipment	3,440	.0046	.0036	2.5	.012	.009
3. Other Vessel Exp.	3,330	.0045	.0035	2.5	.011	.009
4. Maint. & Repairs	18,418	.0249	.0192	5.0	.124	.096
5. Insurance	105,000	.1422	.1093	1.0	.142	.109
6. F.O.-Aux.	2,907	.0039	.0030	1.0	.004	.003
<b>Underway Costs:</b>						
2. Stores Supplies & Equipment	910	.0012	.0009	2.5	.003	.002
4. Maint. & Repair						
Turbine Drive	68,803	.0932	.0716	5.0	.466	.358
	22,596	.0306	.0235	5.0	.153	.178
7. Fuel Oil	258,010	.3496	.2685	1.0	.349	.268
8. Financing	738,313 222,695 961,008	1.0000	.2317 1.0000			
<b>ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST</b>					<b>3.66</b>	
<b>ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING</b>						<b>2.888</b>

CORTE MADERA SERVICE  
(SUPPLEMENTAL SERVICE)

SPAULDING 165'

(3847 Hr. Yr)

	Annual Cost	^ Weight	Weight w/ Financing	Esc. / Year	Weighted Average	
					% Annual Escalation	DOC
						DOC+Fin.
1. Wages & Allowances	206,241	.3462	.2520	7.0	2.4234	1.7640
2. Stores Supplies & Equipment	3,440	.0058	.0042	2.5	.0145	.0105
3. Other Vessel Exp.	3,330	.0056	.0041	2.5	.0140	.0103
4. Maint. & Repairs	18,418	.0309	.0225	5.0	.1545	.1125
5. Insurance	105,000	.1763	.1283	1.0	.1763	.1283
6. F.O.-Aux.	2,200	.0037	.0027	1.0	.0037	.0027
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment						
4. Maint. & Repair	668	.0011	.0008	2.5	.0027	.0020
Turbine	50,491	.0848	.0617	5.0	.4240	.3085
Drive	16,582	.0278	.0203	5.0	.1390	.1050
7. Fuel Oil	189,341	.3178	.2314	1.0	.3178	.2314
	595,711	1.0000				
8. Financing	222,695		.2721			
	818,406		1.0000			
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					3.670	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						2.672

SYSTEM I (5 - Spaulding 165)

Service	Total Annual Cost	Weight	% Annual Increase	Weighted Annual Increase
<u>Direct Operating Cost</u>				
3 - Regular x \$738, 313	\$2, 214, 939	.6502	3.660	2.380
2 - Suppl. x \$595, 711	<u>1, 191, 922</u>	<u>.3498</u>	3.670	<u>1, 284</u>
	\$3, 406, 361	1.0000		

ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST 3.664

Direct Operating Cost + Financing

3 - Regular x \$961, 008	\$2, 883, 024	.6379	2.888	1.842
2 - Suppl. x \$818, 406	<u>1, 636, 812</u>	<u>.3621</u>	2.672	<u>.968</u>
	\$4, 519, 836	1.0000		

ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING 2.810

CORTE MADERA SERVICE  
BOEING HYDROFOIL  
SUPPLEMENTAL SERVICE

(3847 Hrs. Yr.)

	Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average	
					% Annual Escalation	DOC
						DOC+Fin.
1. Wages & Allowances	223,980	.3276	.2236	7.0	2.2932	1.5652
2. Stores Supplies & Equipment	1,325	.0019	.0013	2.5	.0048	.0033
3. Other Vessel Exp.						
4. Maint. & Repairs	65,400	.0956	.0653	5.0	.4780	.3265
5. Insurance	145,000	.2120	.1447	1.0	.2120	.1447
6. F.O.-Aux.						
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment	14,020	.0205	.0140	2.5	.0513	.0350
4. Maint. & Repair						
Turbine	45,684	.0668	.0456	5.0	.3340	.2280
Jet Pump	23,996	.0351	.0239	5.0	.1755	.1195
7. Fuel Oil	164,447	.2405				
8. Financing	683,852	1.0000				
	318,135		3175	0		
	1,001,987					
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					3.7893	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						2.1863

SYSTEM II (3 Spaulding 165)  
(2 Boeing 929)

Service	Total Annual Cost	Weight	% Annual Increase	Weighted Annual Increase
<u>Direct Operating Cost</u>				
3 - Regular x \$738,313	\$2,214,939	.6182	3.66	2.26
2 - Suppl. x \$683,852	<u>1,367,704</u>	<u>.3818</u>	3.789	<u>1.45</u>
	\$3,582,643	1.0000		
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST				3.71
<u>Direct Operating Cost + Financing</u>				
3 - Regular x \$961,008	\$2,883,024	.5899	2.888	1.704
2 - Suppl. x \$1,001,987	<u>2,003,974</u>	<u>.4101</u>	2.5863	<u>1.061</u>
	\$4,886,998	1.0000		
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING				2.77

## SAUSALITO SERVICE

M. V. GOLDEN GATE

( 5082 Hr. Yr. )

	Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average	
					% Annual Escalation	DOC
						DOC+Fin.
1. Wages & Allowance	254,899	.739	.608	7.0	5.173	4.256
2. Stores Supplies & Equipment	2,260	.007	.005	2.5	.017	.012
3. Other Vessel Exp.	2,240	.006	.005	2.5	.015	.012
4. Maint. & Repairs	9,340	.027	.022	5.0	.135	.110
5. Insurance	35,000	.101	.083	1.0	.101	.083
6. F.O.-Aux.	2,460	.008	.006	1.0	.008	.006
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment	1,049	.003	.003	2.5	.007	.007
4. Maint. & Repair	4,310	.012	.010	5.0	.060	.050
7. Fuel Oil	33,472	.097	.080	1.0	.097	.080
	345,030	1.000				
8. Financing	74,232		.178			
	419,262		1.000			
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					5.61	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						4.62

## SAUSALITO SERVICE

## M. V. GOLDEN GATE

(3847 Hr. Yr)

	Annual Cost	Weight	Weight w/ Financing	Esc. / Year	Weighted Average	
					% Annual Escalation	DOC
						DOC+Fin.
1. Wages & Allowance	206,241	.721	.573	7.0	5.047	4.011
2. Stores Supplies & Equipment	2,260	.008	.006	2.5	.020	.015
3. Other Vessel Exp.	2,240	.008	.006	2.5	.020	.015
4. Maint. & Repairs	9,340	.033	.026	5.0	.165	.130
5. Insurance	35,000	.123	.097	1.0	.123	.097
6. F.O.-Aux.	1,865	.006	.005	1.0	.006	.005
<u>Underway Costs:</u>						
2. Stores Supplies & Equipment	775	.003	.002	2.5	.007	.005
4. Maint. & Repair	3,188	.011	.009	5.0	.055	.045
7. Fuel Oil	24,753	.087	.069	1.0	.087	.069
	285,662	1.000				
8. Financing	74,232		.207			
	359,894		1.000			
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST					5.53	
ANNUAL PERCENT INCREASE IN DIRECT OPERATING COST INCLUDING FINANCING						4.39

## SECTION IV

### IV. BASIS FOR ESTIMATING FERRYBOAT PATRONAGE AND ANNUAL REVENUE

1. BACKGROUND
2. PRIMARY MARKET FOR FERRYBOAT SERVICE
3. SPAULDING/HEYE PATRONAGE ESTIMATES
4. ANNUAL GROSS REVENUE ESTIMATES
5. DEMAND MODEL ADJUSTMENTS USED WHEN TESTING VESSEL CANDIDATES



IV. BASIS FOR ESTIMATING FERRYBOAT PATRONAGE AND ANNUAL REVENUE

1. BACKGROUND DATA

Basic background data was derived primarily from the following:

Optimum Bus System, Marin County Transit District,  
August 1969

Feasibility Study of San Francisco - Marin Ferry System,  
Arthur D. Little, Inc., July 1969

Bay Area Transportation Report, Bay Area Transportation Study Commission, May 1969, Supplements II and III

San Francisco - Marin Crossing, Division of Bay Toll Crossings, Transportation Agency, State of California, 1967

Statistical Data Files, Golden Gate Bridge, Highway and Transportation District

The latter provided information about the Bridge's operation of the Tiburon Ferry Service between November 1969 and March 1970, including a survey of passengers conducted during January 1970.

2. PRIMARY MARKET FOR FERRYBOAT SERVICE

The primary market for commuter ferryboat service between Marin County and San Francisco was found to be approximately 60% of the Marin commuters destined for downtown San Francisco. This area lies east of Van Ness Avenue and north of Howard Street. Downtown San Francisco is subdivided into the Central Business District and the Outer Central Business District. The Central Business District is bordered by Howard, Powell, Pacific and the Embarcadero; the Outer Central Business District includes the remainder of the defined area. The majority of the Marin County commuters are bound for the C.B.D. and comparative distribution estimates follow:

TO:	Marin County Transit Dist. 1968	A. D. Little Study 1969	Tiburon Survey Jan. 1970	Spaulding/Heye Assumption August 1970
C.B.D.	54.2%	82.3%	43.7%	75.1%
O.C.B.D.	11.6%	17.7%	14.5%	24.9%
Sub-Total	65.8%	100.0%	58.2%	100.0%
Rest of S.F.	34.2%	—	41.8%	1.3%
TOTAL	100.0%	—	100.0%	100.0%

The A. D. Little Study reported the following potential switch of commuters to a modern ferryboat system:

32,000 commuters x 60% x 34% = 6,528 destined to Downtown San Francisco.

Little's 34% diversion was derived as follows:

35% commuter drivers	x 49% total commuters	= 17%
30% commuter car riders	x 21% total commuters	= 6%
42% commuter bus riders	x 27% total commuters	= 11%
	97%	34%

Analysis of the Tiburon Experiment shows that when the Bridge operated the Tiburon ferryboat service, 25% of the Tiburon Peninsula commuters to Downtown San Francisco were being served.

In a special report to the Bridge District during March 1970, Peat, Marwick, Mitchell and Company estimated that if ferryboat fares were the same as bus fares, 22% to 33% of the commuters would use the ferryboat service if the ferryboat service took from 10 to 20 minutes longer than the same trip via private automobile.

### 3. SPAULDING/HEYE PATRONAGE ESTIMATES

Four Demand Models were constructed for the purposes of testing ferryboat vessel candidates, estimating patronage and revenues, and designing an optimum ferryboat system. Model No. I was based upon the empirical data developed in the Tiburon Experiment and assumed the use of 15 and 20 knot conventional vessels. Fares were assumed at 50¢ O.W. between Southern Marin and San Francisco using 15 knot vessels, and at 75¢ between Central

Marin and San Francisco using 20 knot vessels. Block times considered were 30 minutes for Southern Marin and 45 minutes for Central Marin; service being offered at 30 minute intervals. It was further assumed that the service described would attract 25% of the Tiburon Peninsula market and 20% of the rest of the Marin commuter market destined for downtown San Francisco. The ratio of commuters to noncommuters was assumed to be 5:1.

Model No. II assumed that fares to both Southern and Central Marin would be 50¢ O.W. Service to Southern Marin was improved. Service to Central and Northern Marin via Corte Madera Creek was improved by the use of 25 knot vessels, reducing the block time from 45 to 40 minutes. The service improvement to Southern Marin increased that demand by 22.2%. The 33.3% reduction in fare (75¢ to 50¢) and the improved service to Corte Madera Creek caused the demand for this service to increase 38%. The ratio of commuters to noncommuters changed from 5:1 to 4:1 for Southern Marin service and to 3:1 for Central and Northern Marin service.

Model No. III assumed service being provided by advanced marine systems with one way fares to all terminals set at 75¢. Demand totals were greater than those in Model I due to the improved service, but were less than those in Model II because of the increase in fares by 50%.

Model No. IV was based upon the A. D. Little Study 50¢ O.W. advanced marine system proposal. However, only commuters destined to C.B.D. (90%) and O.C.B.D. (10%) were considered. This reduced Little's estimated weekday commuter demand by 33.3% from 11,000 to 7,334. The ratio of commuters to non-commuters (7:3) was used unchanged.

#### 4. ANNUAL GROSS REVENUE ESTIMATES

The Little Study estimated the annual gross revenue for the proposed advanced marine system as follows:

$$\begin{aligned} 253 \text{ wkdys} \times 15,000 \text{ (C+N-C)} \times \$1.00 \text{ R.T.} &= \$3,795,000. \\ 112 \text{ S/S/H} \times 6,000 \text{ (C+N-C)} \times \$1.00 \text{ R.T.} &= \underline{\underline{672,000}}. \\ &\text{TOTAL} \quad \$4,467,000. \end{aligned}$$

The Little Study also considered revenues from concessions and parking. These latter have been omitted in the Spaulding/Heye study for the sake of simplicity and to be conservative.

The Spaulding/Heye gross annual revenue estimates have been based upon the following data:

Ratio of adults (full fare) to children (half fare):

Weekdays: Adults 90%, Children 10% or 9:1

$$90\% \times 1.00 + 10\% \times .50 = 95\%$$

Saturdays/Sundays/Holidays: 66.7% to 33.3% or 2:1

$$66.7\% \times 1.00 + 33.3\% \times .50 = 83.3\%$$

Comparative passenger loads:

Weekdays	100%	Commuter service
Saturdays	160%	Commuter service
Sundays	250%	Commuter service
Holidays	300%	Commuter service

Weighted revenue factor:

$$252 \text{ Weekdays } \times (C+N-C) \times 95\% \times 100\% \times \$1.00 \text{ RT} = \$239.400$$

$$52 \text{ Saturdays } \times (C+N-C) \times 83.3\% \times 160\% \times \$1.00 \text{ RT} = 69.306$$

$$52 \text{ Sundays } \times (C+N-C) \times 83.3\% \times 250\% \times \$1.00 \text{ RT} = 108.290$$

$$9 \text{ Holidays } \times (C+N-C) \times 83.3\% \times 300\% \times \$1.00 \text{ RT} = \underline{22.491}$$

$$\$439.487$$

2% bad weather and seasonal fluctuations

$$\underline{-8.790}$$

$$\$430.697$$

$$\text{Annual Gross Revenue @ 50¢ fare (OW)} = (C+N-C) = \$430.697$$

$$\text{Annual Gross Revenue @ 75¢ fare (OW)} = 1.5 \times (C+N-C) = 1.5 \times 430.697 = \$646.046$$

Bay Circle Cruise (Supplemental Service) annual revenue estimates have been based upon a comparative value judgment of vessel passenger appeal and the number of cruises available for each system. Fares for Bay Circle Cruises were assumed to be \$1.75 for 20 knot vessels, \$2.00 for 25 knot vessels and \$3.50 for advanced system craft (35+ knots).

Ratio of adults (full fare) to children (half fare):

66.7% to 33.3% or 2:1

$$66.7\% \times 1.00 + 33.3\% \times .50 = 83.3\%$$

Comparative passenger loads:

Weekdays	100%
Saturdays	150%
Sundays	200%
Holidays	225%

System Ia and Ib

Trips per day:

Weekdays	10/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays x 83.3% x 100% x 10 x \$2.00 =	\$4,198.32
52 Saturdays x 83.3% x 150% x 9 x \$2.00 =	1,169.53
52 Sundays x 83.3% x 200% x 9 x \$2.00 =	1,559.38
9 Holidays x 83.3% x 225% x 9 x \$2.00 =	303.63
	\$7,230.86

Average load factor = 42%

Revenue = \$7,230.86 x 42% x 636 = \$1,931,507.

System IIa and IIb

Trips per day:

Weekdays	9/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays x 83.3% x 100% x 9 x \$3.50 =	\$6,612.37
52 Saturdays x 83.3% x 150% x 9 x \$3.50 =	2,046.69
52 Sundays x 83.3% x 200% x 9 x \$3.50 =	2,728.91
9 Holidays x 83.3% x 225% x 9 x \$3.50 =	531.35
	\$11,919.32

Average load factor = 44%

Revenue = \$11,919.32 x 44% x 300 = \$1,573,350.

### System IIIa and IVa

Trips per day:

Weekdays	10/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays x 83.3% x 100% x 10 x \$1.75 =	\$3,673.53
52 Saturdays x 83.3% x 150% x 9 x \$1.75 =	1,023.34
52 Sundays x 83.3% x 200% x 9 x \$1.75 =	1,364.46
9 Holidays x 83.3% x 225% x 9 x \$1.75 =	265.66
	\$6,327.00

Average load factor = 30%

Revenue = \$6,327.00 x 30% x 500 = \$949,050.

### System IIIb and IVb

Trips per day:

Weekdays	15/day
Weekends	13/day
Holidays	13/day

Weighted revenue factor:

252 Weekdays x 83.3% x 100% x 15 x \$1.75 =	\$5,510.30
52 Saturdays x 83.3% x 150% x 13 x \$1.75 =	1,478.15
52 Sundays x 83.3% x 200% x 13 x \$1.75 =	1,970.88
9 Holidays x 83.3% x 225% x 13 x \$1.75 =	383.76
	\$9,343.09

Average load factor = 30%

Revenue = \$9,343.09 x 30% x 500 = \$1,401,464.

### System Va

Trips per day:

Weekdays	5/day
Weekends	4/day
Holidays	4/day

Weighted revenue factor:

252 Weekdays x 83.3% x 100% x 5 x \$1.75 =	\$1,836.77
52 Saturdays x 83.3% x 150% x 4 x \$1.75 =	454.82
52 Sundays x 83.3% x 200% x 4 x \$1.75 =	606.42
9 Holidays x 83.3% x 225% x 4 x \$1.75 =	118.08
	<u>\$3,016.09</u>

Average load factor = 30%

Revenue = \$3,016.08 x 30% x 624 = \$564,612.

#### System Vb

Trips per day:

Weekdays	10/day
Weekends	9/day
Holidays	9/day

Weighted revenue factor:

252 Weekdays x 83.3% x 100% x 10 x \$1.75 =	\$3,673.53
52 Saturdays x 83.3% x 150% x 9 x \$1.75 =	1,023.34
52 Sundays x 83.3% x 200% x 9 x \$1.75 =	1,364.46
9 Holidays x 83.3% x 225% x 9 x \$1.75 =	265.67
	<u>\$6,327.00</u>

Average load factor = 30%

Revenue = \$6,327.00 x 30% x 624 = \$1,184.414.

#### System VIb and VIc

Trips per day:

Weekdays	5/day
Weekends	4/day
Holidays	4/day

Weighted revenue factor:

252 Weekdays x 83.3% x 100% x 5 x \$1.75 =	\$1,838.77
52 Saturdays x 83.3% x 150% x 4 x \$1.75 =	454.82
52 Sundays x 83.3% x 200% x 4 x \$1.75 =	606.42
9 Holidays x 83.3% x 225% x 4 x \$1.75 =	118.08
	<u>\$3,016.09</u>

Average load factor = 30%

$$\text{Revenue} = \$3,018.09 \times 30\% \times 976 = \$883,111.$$

Revenue projections were based upon increases of 5% per year for the Southern Marin service, 8% per year for the regular service to Corte Madera Creek, and 10% per year for the Bay Circle Cruise service.

5. MODEL ADJUSTMENTS USED WHEN TESTING VESSEL CANDIDATES

A. Southern Marin - 15 knot vessels M.V. Golden Gate Class  
M.V. Hawaii State Class

Model No. I: 998 Commuters  
1,198 Commuters + Noncommuters

No adjustment necessary.

B. Central Marin - 20 knot vessels Blount 500  
Halter 500  
Blount 624  
Spaulding 209

	<u>Weekday Commuters</u>	<u>Commuters + Noncommuters</u>	<u>Annual Revenue in \$000's</u>
Model No. I: Base Demand Central + Northern Market	2,748	3,298	\$2,131.

Adjustment: Increased  
demand from improved  
service: peak, etc. + 267 + 322 + 208.

75¢ O. W. Fare:  
TOTALS 3,015 3,620 \$2,339.

Adjustment: Increased demand from reduced fare, 75¢ to 50¢ + 485 + 980

50¢ O. W. Fare:  
TOTALS 3,500 4,600 \$1,981.

C. Central Marin - 25 knot vessels

Spaulding 165 (G.T. Avalon  
not suitable for San Fran-  
cisco Bay)

	<u>Weekday Commuters</u>	<u>Commuters + Noncommuters</u>	<u>Annual Revenue in \$000's</u>
Model No. II: Base			
Demand Central +			
Northern Market	3,792	4,989	\$2,149.
<u>Adjustment: Increased demand from improved service: peak and over- all passenger appeal</u>	<u>+ 379</u>	<u>+ 499</u>	<u>+ 215.</u>
50¢ O.W. Fare:			
TOTALS	4,171	5,488	<u>\$2,364.</u>

D. Central Marin - 25 and 35 knot vessel combination

Spaulding 165  
Boeing 929

	<u>Weekday Commuters</u>	<u>Commuters + Noncommuters</u>	<u>Annual Revenue in \$000's</u>
Model No. II: Base			
Demand Central +			
Northern Market	3,792	4,989	\$2,149.
<u>Adjustment: Base demand increased for hydrofoil ser- vice</u>	<u>+ 708</u>	<u>+1,477</u>	<u>+ 636.</u>
50% O.W. Fare:			
TOTALS	4,500	6,466	<u>\$2,785.</u>

Model No. II: Base			
Demand Central +			
Northern Market	3,792	4,989	\$2,149.

<u>Adjustment: Increased demand from improved service and overall passenger appeal</u>	<u>+1,008</u>	<u>+1,811</u>	<u>+ 780.</u>
50¢ O.W. Fare:			
TOTALS	4,800	6,800	<u>\$2,929.</u>



## SECTION V

### V. ESTIMATED FERRYBOAT SYSTEM VESSEL OPERATING COST, FINANCING AND REVENUE

<u>Systems:</u>	<u>Vessel Combinations:</u>	<u>Service:</u>
I a & b	5 Spaulding 165	Corte Madera
II a & b	3 Spaulding 165 + 2 Boeing 929	" "
III a & b	5-6 Blount 500	" "
IV a & b	5-6 Halter 500	" "
V a & b	4-5 Blount 624	" "
VI a, b & c	3-4 Spaulding 209	" "
VII a & b	2 Golden Gate	Sausalito
VII c	2 Hawaii State	"



VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM 1-a  
Central MARIN SERVICE

Vessels: 5 - Spaulding 165

Operating  
Model No. II Base Demand

Regular Service: 50¢ Fare

<u>16</u>	Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u>	Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u>	Minute Intervals	<u>40</u>	Minutes Block Time

Supplemental Service \$2.00 Fare

<u>10</u>	Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>9</u>	Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare  
11 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels (5,082hrs) @\$ <u>387,994</u>	<u>\$ 1,163,982</u>
<u>2</u> Vessels (3,847hrs) @\$ <u>338,629</u>	<u>677,258</u>
<u>TOTAL F - DOC/YR</u>	

\$ 1,841,240

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

<u>3</u> Vessels (13.5 hrs/day) @ 81.46 /hr = \$ <u>831,380</u>	
<u>2</u> Vessels (8.94 hrs/day) @ 81.46 /hr = <u>367,039</u>	
<u>Total Weekday V - DOC/YR</u>	

\$ 1,198,420

113 Sat., Sun. & Holidays (10 hrs/day)

<u>3</u> Vessels (8.0 hrs/day) @ 81.46 /hr = \$ <u>220,920</u>	
<u>2</u> Vessels (8.0 hrs/day) @ 81.46 /hr = <u>147,280</u>	
<u>TOTAL S/S/H V - DOC/YR</u>	

\$ 368,200

TOTAL V - DOC/YR \$ 1,566,620

TOTAL DOC/YR \$ 3,407,860

ESTIMATED TOTAL ANNUAL REVENUE:

<u>Regular Service</u> 4,989 Commuters + Noncommuters	<u>\$ 2,148,747</u>
<u>Supplemental Service</u> BCC	<u>1,931,507</u>
<u>TOTAL REVENUE</u>	

\$ 4,080,254

GROSS PROFIT FROM OPERATIONS \$ 672,394

FINANCING

<u>Payment to Principal and Interest/Yr.</u>	<u>7.0%</u>	<u>8.75%</u>
<u>5</u> Vessels @\$ <u>2,100,000</u> Ea.	<u>\$ 10,500,000</u>	
<u>Vessels @ \$</u> _____ Ea.	_____	_____
<u>TOTAL</u>	<u>\$ 10,500,000</u>	<u>\$ 976,878</u>
		<u>\$ 1,113,476</u>

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM 1-b  
Central MARIN SERVICE

Vessels: 5 - Spaulding 165

Operating  
 Model No. II, Base Demand  
 With Adjustments

Regular Service: 50¢ Fare

<u>16</u>	Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u>	Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u>	Minute Intervals	<u>40</u>	Minutes Block Time

Supplemental Service \$2.00 Fare

<u>10</u>	Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>9</u>	Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

<u>11</u>	Minute Interval
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DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels ( <u>5,082</u> hrs) @ \$ <u>387.994</u>	<u>\$ 1,163,982</u>	
<u>2</u> Vessels ( <u>3,847</u> hrs) @ \$ <u>338.629</u>	<u>677,258</u>	
TOTAL F - DOC/YR		<u>\$ 1,841,240</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

<u>3</u> Vessels ( <u>13.5</u> hrs/day) @ <u>81.46</u> /hr = \$ <u>831,381</u>		
<u>2</u> Vessels ( <u>8.94</u> hrs/day) @ <u>81.46</u> /hr = <u>367,039</u>		
Total Weekday V - DOC/Yr.		<u>\$ 1,198,420</u>

113 Sat., Sun. & Holidays (10 hrs/day)

<u>3</u> Vessels ( <u>8.0</u> hrs/day) @ <u>81.46</u> /hr = \$ <u>220,920</u>		
<u>2</u> Vessels ( <u>8.0</u> hrs/day) @ <u>81.46</u> /hr = <u>147,280</u>		
TOTAL S/S/H V - DOC/YR		<u>\$ 368,200</u>

TOTAL V - DOC/YR \$ 1,566,620

TOTAL DOC/YR \$ 3,407,860

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>5,488</u> Commuters + Noncommuters	<u>\$ 2,363,665</u>	
Supplemental Service BCC	<u>1,931,507</u>	
TOTAL REVENUE		<u>\$ 4,295,172</u>

GROSS PROFIT FROM OPERATIONS \$ 887,312

FINANCING

Payment to Principal and Interest/Yr. 7.0% 8.75%

<u>5</u> Vessels @ \$ <u>2,100,000</u> Ea.	<u>\$ 10,500,000</u>
Vessels @ \$ _____ Ea.	_____

TOTAL	<u>\$ 10,500,000</u>	<u>\$ 976,878</u>	<u>\$ 1,113,476</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM Ha  
Central MARIN SERVICE

Vessels: 3 Spaulding 165  
 2 Boeing 929-140

Operating  
 Model No. II Base Demand  
Increased for  
Hydrofoil Service

Regular Service: 50¢ Fare

<u>16</u>	Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u>	Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u>	Minute Intervals	<u>40</u>	Minutes Block Time

Supplemental Service \$3.50 Fare

<u>9</u>	Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>9</u>	Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare  
10 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3-S165</u> Vessels (5,082hrs) @ \$ <u>387,994</u>	\$ <u>1,163,982</u>
<u>2-B-929</u> Vessels (3,847hrs) @ \$ <u>435,705</u>	<u>871,410</u>
TOTAL F - DOC/YR	
	\$ <u>2,035,392</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

<u>3-S165</u> Vessels (13.5 hrs/day) @ \$81.46/hr = \$ <u>831,381</u>	
<u>2-B929</u> Vessels (8.5 hrs/day) @ \$81.48/hr = <u>349,060</u>	
Total Weekday V - DOC/Yr.	
	\$ <u>1,180,441</u>

113 Sat., Sun. & Holidays (10 hrs/day)

<u>3-S165</u> Vessels (8.0 hrs/day) @ \$81.46/hr = \$ <u>220,920</u>	
<u>2-B929</u> Vessels (8.0 hrs/day) @ \$81.48/hr = <u>147,315</u>	
TOTAL S/S/H V - DOC/YR	
	\$ <u>368,235</u>

TOTAL V - DOC/YR \$ 1,548,676

TOTAL DOC/YR \$ 3,584,068

ESTIMATED TOTAL ANNUAL REVENUE:

<u>Regular Service</u> <u>6,466</u> <u>Commuters + Noncommuters</u>	\$ <u>2,784,887</u>
<u>Supplemental Service</u> <u>BCC</u>	<u>1,573,350</u>
TOTAL REVENUE	
	\$ <u>4,358,237</u>

GROSS PROFIT FROM OPERATIONS \$ 774,169

FINANCING

Payment to Principal and Interest/Yr.	<u>7.0%</u>	<u>8.75%</u>
<u>3</u> Vessels @ \$ <u>2,100,000</u> Ea.	\$ <u>6,300,000</u>	
<u>2</u> Vessels @ \$ <u>3,000,000</u> Ea.	<u>6,000,000</u>	
TOTAL		\$ <u>12,300,000</u>
	\$ <u>1,144,343</u>	\$ <u>1,304,357</u>

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM II b  
Central MARIN SERVICE

Vessels: 3 Spaulding 165  
 2 Boeing 929-110

Operating  
 Model No. II Base Demand  
 With Adjustment for  
 Hydrofoil & Improved Services

Regular Service: 50¢ Fare

<u>16</u>	Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u>	Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u>	Minute Intervals	<u>40</u>	Minutes Block Time

Supplemental Service \$3.50 Fare

<u>9</u>	Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>9</u>	Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

<u>10</u>	Minute Interval
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DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3-S165	Vessels (5,082hrs) @\$ 387,994	\$ 1,163,982
2-B929	Vessels (3,847hrs) @\$ 435,705	871,410
TOTAL F - DOC/YR		\$ 2,035,392

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

3-S165	Vessels (13.5 hrs/day)@\$81.46/hr = \$ 831,380
2-B929	Vessels (8.5 hrs/day)@\$81.46/hr = 349,060
Total Weekday V - DOC/Yr. \$ 1,180,441	

113 Sat., Sun. & Holidays (10 hrs/day)

3-S165	Vessels (8.0 hrs/day)@\$81.46/hr = \$ 220,920
2-B929	Vessels (8.0 hrs/day)@\$81.46/hr = 147,315
TOTAL S/S/H V - DOC/YR \$ 368,235	

TOTAL V - DOC/YR \$ 1,548,676

TOTAL DOC/YR \$ 3,584,068

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service	6,800 Commuters + Noncommuters	\$ 2,928,740
Supplemental Service	BCC	1,573,350
TOTAL REVENUE		\$ 4,502,090

GROSS PROFIT FROM OPERATIONS \$ 918,022

FINANCING

Payment to Principal and Interest/Yr.	7.0%	8.75%
3 Vessels @\$ 2,100,000 Ea.	\$ 6,300,000	
2 Vessels @\$ 3,000,000 Ea.	6,000,000	
TOTAL	\$12,300,000	\$ 1,144,343 \$ 1,304,357

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM III a  
Central MARIN SERVICE

Vessels: 5 Blount 500

Operating  
 Model No. I Base Demand  
 With Adjustments

Regular Service: 75¢ Fare

<u>16</u> Hour Weekdays	<u>32</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals	<u>45</u>	Minutes Block Time

Supplemental Service \$ 1.75 Fare

<u>10</u> Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>9</u> Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 75¢ Fare

<u>15</u> Minute Interval
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DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels (5,082 hrs) @ \$ <u>311,861</u>	\$ <u>935,583</u>
<u>2</u> Vessels (3,847 hrs) @ \$ <u>262,518</u>	<u>525,036</u>
TOTAL F - DOC/YR	

\$ 1,460,619

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

<u>3</u> Vessels (13.5 hrs/day) @ \$ 22.95/hr = \$ <u>234,228</u>	
<u>2</u> Vessels (9.0 hrs/day) @ 22.95/hr = <u>104,101</u>	
Total Weekday V - DOC/YR	

\$ 338,329

113 Sat., Sun. & Holidays (10 hrs/day)

<u>3</u> Vessels (8.33 hrs/day) @ \$ 22.95/hr = \$ <u>64,808</u>	
<u>2</u> Vessels (8.00 hrs/day) @ 22.95/hr = <u>41,493</u>	
TOTAL S/S/H V - DOC/YR	

\$ 106,301

TOTAL V - DOC/YR \$ 444,630

TOTAL DOC/YR \$ 1,905,249

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>3,620</u> Commuters + Noncommuters	\$ <u>2,338,687</u>
Supplemental Service BCC	<u>949,050</u>
TOTAL REVENUE	

\$ 3,287,737

GROSS PROFIT FROM OPERATIONS \$ 1,382,488

FINANCING

Payment to Principal and Interest/Yr. 7.0% 8.75%

<u>5</u> Vessels @ \$ <u>825,000</u> Ea.	\$ <u>4,125,000</u>
Vessels @ \$ _____ Ea.	_____

TOTAL	\$ <u>4,125,000</u>	\$ <u>383,774</u>	\$ <u>437,437</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM III b  
Central MARIN SERVICE

Vessels: 6 Blount 500

Operating  
 Model No. I Base Demand With  
 Adjustment Including 50¢ Fare

Regular Service: 50¢ Fare

<u>16</u> Hour Weekdays	<u>33</u> Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u> Round Trips/Day
<u>30</u> Minute Intervals	<u>45</u> Minutes Block Time

Supplemental Service \$1.75 Fare

<u>18</u> Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>16</u> Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

<u>13</u> Minute Interval
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DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels ( <u>5,082</u> hrs) @ \$ <u>311,861</u>	\$ <u>935,583</u>
<u>3</u> Vessels ( <u>3,847</u> hrs) @ \$ <u>262,518</u>	<u>787,554</u>
TOTAL F - DOC/YR	

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 11 hrs/day

<u>3</u> Vessels ( <u>13.5</u> hrs/day) @ <u>22.95/hr</u> = \$ <u>234,228</u>
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<u>3</u> Vessels ( <u>9</u> hrs/day) @ <u>22.95/hr</u> = \$ <u>156,152</u>
Total Weekday V - DOC/Yr.

<u>113</u> Sat., Sun. & Holidays (10 hrs/day)	\$ <u>390,380</u>
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<u>3</u> Vessels ( <u>8.33</u> hrs/day) @ <u>22.95/hr</u> = \$ <u>64,808</u>
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<u>3</u> Vessels ( <u>8.00</u> hrs/day) @ <u>22.95/hr</u> = \$ <u>62,240</u>
TOTAL S/S/H V - DOC/YR

\$ <u>127,048</u>
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TOTAL V - DOC/YR	\$ <u>517,428</u>
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TOTAL DOC/YR	\$ <u>2,240,565</u>
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ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service <u>4,600</u> Commuters + Noncommuters	\$ <u>1,981,206</u>
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Supplemental Service BCC	\$ <u>1,401,464</u>
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TOTAL REVENUE	\$ <u>3,382,670</u>
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GROSS PROFIT FROM OPERATIONS	\$ <u>1,142,105</u>
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FINANCING

Payment to Principal and Interest/Yr.	7.0%	8.75%
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<u>6</u> Vessels @ \$ <u>825,000</u> Ea.	\$ <u>4,950,000</u>
Vessels @ \$ _____ Ea.	_____

TOTAL	\$ <u>4,950,000</u>	\$ <u>460,528</u>	\$ <u>524,924</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM IV b  
Central MARIN SERVICE

<u>Vessels:</u> 6 Halter 500	<u>Operating</u> <u>Model No. I Base Demand</u> <u>With Adjustments Including</u> <u>50¢ Fare</u>
<u>Regular Service:</u> <u>50¢</u> <u>Fare</u>	
16 Hour Weekdays <u>33</u> Round Trips/Day	
10 Hour Sat/Sun/Holidays <u>18</u> Round Trips/Day	
30 Minute Intervals <u>45</u> Minutes Block Time	
<u>Supplemental Service</u> <u>\$1.75</u> <u>Fare</u>	
15 Bay Circle Cruises/Day (Off-Peak Weekdays)	
13 Bay Circle Cruises/Day (Sat/Sun/Holidays)	
<u>Peak Commuter Service:</u> <u>50¢</u> <u>Fare</u>	
13 Minute Interval	
<u>DIRECT OPERATING COST (DOC)</u>	
<u>Fixed Direct Operating Cost/Year</u>	
3 Vessels (5,082 hrs) @ \$ 365,279	\$ 1,095,837
3 Vessels (3,847 hrs) @ \$ 315,931	<u>947,793</u>
TOTAL F - DOC/YR	\$ <u>2,043,630</u>
<u>Direct Operating Cost/Year - Underway (V - DOC)</u>	
252 Weekdays 16 & 11 hrs/day	
3 Vessels (13.5 hrs/day) @ \$35.26/hr = \$ 359,864	
3 Vessels (9.0 hrs/day) @ 35.26/hr = 239,909	
Total Weekday V - DOC/YR.	\$ <u>599,773</u>
113 Sat., Sun. & Holidays (10 hrs/day)	
3 Vessels (8.33 hrs/day) @ \$35.26/hr = \$ 99,570	
3 Vessels (8.0 hrs/day) @ 35.26/hr = 95,625	
TOTAL S/S/H V - DOC/YR	\$ <u>195,195</u>
TOTAL V - DOC/YR	\$ <u>794,968</u>
TOTAL DOC/YR	\$ <u>2,838,598</u>
<u>ESTIMATED TOTAL ANNUAL REVENUE:</u>	
Regular Service 4,600 Commuters + Noncommuters	\$ <u>1,981,206</u>
Supplemental Service BCC	<u>1,401,464</u>
TOTAL REVENUE	\$ <u>3,382,670</u>
GROSS PROFIT FROM OPERATIONS	\$ <u>544,072</u>

<u>FINANCING</u>		
Payment to Principal and Interest/Yr.	7.0%	8.75%
6 Vessels @\$1,650,000 Ea.	\$ <u>9,900,000</u>	
Vessels @ \$ _____ Ea.		
TOTAL	\$ <u>9,900,000</u>	\$ <u>921,056</u> \$ <u>1,049,848</u>



VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM V b  
Central MARIN SERVICE

Vessels: 5 Blount 624

Operating  
 Model No. I Base Demand  
 With Adjustments Including  
50¢ Fare

Regular Service: 50¢ Fare

<u>16</u>	Hour Weekdays	<u>32</u>	Round Trips/Day
<u>10</u>	Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u>	Minute Intervals	<u>45</u>	Minutes Block Time

Supplemental Service \$1.75 Fare

<u>10</u>	Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>9</u>	Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

<u>15</u>	Minute Interval
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DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels (5,082hrs) @ \$ <u>362,653</u>	\$ <u>1,087,959</u>	
<u>2</u> Vessels (3,847hrs) @ \$ <u>308,568</u>	<u>617,136</u>	
<u>TOTAL F - DOC/YR</u>		<u>\$ 1,705,095</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 & 1 hrs/day

<u>3</u> Vessels (13.5 hrs/day) @ \$26.20/hr = \$ <u>267,397</u>		
<u>2</u> Vessels (9.0 hrs/day) @ \$26.20/hr = <u>118,843</u>		
<u>Total Weekday V - DOC/Yr.</u>		<u>\$ 386,240</u>

113 Sat., Sun. & Holidays (10 hrs/day)

<u>3</u> Vessels (8.33 hrs/day) @ \$26.20/hr = \$ <u>73,985</u>		
<u>2</u> Vessels (8.0 hrs/day) @ \$26.20/hr = <u>47,369</u>		
<u>TOTAL S/S/H V - DOC/YR</u>		<u>\$ 121,355</u>

TOTAL V - DOC/YR \$ 507,595

TOTAL DOC/YR \$ 2,212,690

ESTIMATED TOTAL ANNUAL REVENUE:

<u>Regular Service</u> 4,600 Commuters + Noncommuters	\$ <u>1,981,206</u>	
<u>Supplemental Service</u> BCC	<u>1,184,414</u>	
<u>TOTAL REVENUE</u>		<u>\$ 3,165,620</u>

GROSS PROFIT FROM OPERATIONS \$ 952,930

FINANCING

Payment to Principal and Interest/Yr. @ 7.0% @ 8.75%

<u>5</u> Vessels @ \$ <u>1,017,500</u> Ea.	\$ <u>5,087,500</u>		
<u>Vessels</u> @ \$ _____ Ea.	_____		
<u>TOTAL</u>	<u>\$ 5,087,500</u>	<u>\$ 473,320</u>	<u>\$ 539,505</u>

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VIA  
Central MARIN SERVICE

Vessels: 3 Spaulding 209

Operating  
 Model No. I base demand  
with adjustments

Regular Service: 75¢ Fare

<u>16</u>	Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u>	Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u>	Minute Intervals	<u>45</u>	Minutes Block Time

Supplemental Service 75¢ Fare

<u>      </u>	Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>      </u>	Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 75¢ Fare  
30 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

3 Vessels (5,082 hrs) @ \$ 454,348 \$ 1,363,044

       Vessels (       hrs) @ \$         
       TOTAL F - DOC/YR       

\$ 1,363,044

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 hrs/day

3 Vessels (13.5 hrs/day) @ 51.57 /hr = \$ 526,323

       Vessels (       hrs/day) @        /hr =         
       Total Weekday V - DOC/YR.       

\$ 526,323

113 Sat., Sun. & Holidays (10 hrs/day)

3 Vessels (8.33 hrs/day) @ 51.57 hr = \$ 145,627

       Vessels (       hrs/day) @        /hr =         
       TOTAL S/S/H V - DOC/YR       

\$ 145,627

TOTAL V - DOC/YR        \$ 671,950

TOTAL DOC/YR        \$ 2,034,994

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 3620 Commuters + Noncommuters \$ 2,338,687

Supplemental Service BCC

TOTAL REVENUE        \$ 2,338,687

GROSS PROFIT FROM OPERATIONS        \$ 303,693

FINANCING

Payment to Principal and Interest/Yr.        @ 7.0%        @ 8.75%

3 Vessels @ \$ 2,650,000 Ea. \$ 7,950,000

       Vessels @ \$        Ea.       

TOTAL \$ 7,950,000 \$ 739,636 \$ 843,060



VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VIc  
Central MARIN SERVICE

Vessels: 4 Spaulding 209

Operating

Model No. I Base Demand with  
 Adjustments Including 50¢ Fare

Regular Service: 50¢ Fare

<u>16</u> Hour Weekdays	<u>31</u> Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u> Round Trips/Day
<u>30</u> Minute Intervals	<u>45</u> Minutes Block Time

Supplemental Service \$1.75 Fare

<u>5</u> Bay Circle Cruises/Day (Off-Peak Weekdays)
<u>4</u> Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare  
18 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>3</u> Vessels (5082 hrs) @\$ <u>454,348.</u>	<u>\$ 1,363,044.</u>	
<u>1</u> Vessels (3847 hrs) @\$ <u>400,058.</u>	<u>400,058.</u>	
<u>TOTAL F - DOC/YR</u>		<u>\$ 1,763,102.</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16&1 hrs/day

<u>3</u> Vessels (13.5 hrs/day) @\$ <u>51.57/hr</u> = <u>\$ 526,323.</u>		
<u>1</u> Vessels (9.0 hrs/day) @\$ <u>51.57/hr</u> = <u>116,961.</u>		
<u>Total Weekday V - DOC/Yr.</u>		<u>\$ 643,284.</u>

113 Sat., Sun. & Holidays (10 hrs/day)

<u>3</u> Vessels (8.33 hrs/day) @\$ <u>51.57/hr</u> = <u>\$ 145,627.</u>		
<u>1</u> Vessels (8.0 hrs/day) @\$ <u>51.57/hr</u> = <u>46,619.</u>		
<u>TOTAL S/S/H V - DOC/YR</u>		<u>\$ 192,246.</u>

TOTAL V - DOC/YR

\$ 835,530.

TOTAL DOC/YR

\$ 2,598,632.

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 4600 Commuters + Noncommuters \$ 1,981,206.

Supplemental Service BCC 883,111.

TOTAL REVENUE \$ 2,864,317.

GROSS PROFIT FROM OPERATIONS \$ 265,685

FINANCING

Payment to Principal and Interest/Yr. @ 7.0% @ 8.75%

4 Vessels @\$ 2,650,000. Ea. \$ 10,600,000

Vessels @\$ Ea.

TOTAL \$ 10,600,000. \$ 986,182. \$ 1,124,080.

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VII a  
Southern MARIN SERVICE

Vessels: 2 Golden Gate Class

Operating  
 Model No. I Base Demand

Regular Service: 50¢ Fare

<u>11</u> Hour Weekdays	<u>20</u> Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u> Round Trips/Day
<u>30</u> Minute Intervals	<u>30</u> Minutes Block Time

Supplemental Service Fare

Bay Circle Cruises/Day (Off-Peak Weekdays)

Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

30 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

2 Vessels (3847 hrs) @ \$ 256, 946. \$ 513, 892.

Vessels (   hrs) @ \$   

TOTAL F - DOC/YR \$ 513, 892.

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 11 hrs/day

2 Vessels (8. 16 hrs/day) @ \$ 9. 95 /hr = \$ 40, 921.

Vessels (   hrs/day) @    /hr =   

Total Weekday V - DOC/Yr. \$ 40, 921.

113 Sat., Sun. & Holidays (10 hrs/day)

2 Vessels (7. 35 hrs/day) @ \$ 9. 95 /hr = \$ 16, 528.

Vessels (   hrs/day) @    /hr =   

TOTAL S/S/H V - DOC/YR \$ 16, 528.

TOTAL V - DOC/YR \$ 57, 449.

TOTAL DOC/YR \$ 571, 341.

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 1198 Commuters + Noncommuters \$ 515, 975.

Supplemental Service BCC

TOTAL REVENUE \$ 515, 975.

GROSS PROFIT FROM OPERATIONS \$ (55, 366.)

FINANCING

Payment to Principal and Interest/Yr.

7. 0%

8. 75%

2 Vessels @ \$ 700, 000. Ea. \$ 1, 400, 000

Vessels @ \$    Ea.   

TOTAL \$ 1, 400, 000. \$ 130, 250. \$ 148, 463.

VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VII b  
Southern MARIN SERVICE

Vessels: 2 Golden Gate Class

Operating  
 Model No. I Base Demand

Regular Service: 50¢ Fare

<u>16</u> Hour Weekdays	<u>30</u> Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u> Round Trips/Day
<u>30</u> Minute Intervals	<u>30</u> Minutes Block Time

Supplemental Service Fare

<u>Bay Circle Cruises</u> /Day (Off-Peak Weekdays)
<u>Bay Circle Cruises</u> /Day (Sat/Sun/Holidays)

Peak Commuter Service: 50¢ Fare

<u>30</u> Minute Interval
---------------------------

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>2</u> Vessels ( <u>5082</u> hrs) @ \$ <u>306,199.</u>	<u>\$ 612,398.</u>
<u>Vessels</u> ( <u>      </u> hrs) @ <u>      </u>	<u>      </u>
<u>TOTAL F - DOC/YR</u>	<u>      </u>

Direct Operating Cost/Year - Underway (V - DOC)

<u>252</u> Weekdays <u>16</u> hrs/day	<u>      </u>	<u>      </u>	<u>\$ 612,398.</u>
<u>2</u> Vessels ( <u>12.21</u> hrs/day) @ \$ <u>9.95</u> /hr = <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>Vessels</u> ( <u>      </u> hrs/day) @ <u>      </u> /hr = <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>Total Weekday V - DOC/YR</u>	<u>      </u>	<u>      </u>	<u>\$ 61,231.</u>
<u>113</u> Sat., Sun. & Holidays ( <u>10</u> hrs/day)	<u>      </u>	<u>      </u>	<u>      </u>
<u>2</u> Vessels ( <u>9.35</u> hrs/day) @ <u>9.95</u> /hr = <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>Vessels</u> ( <u>      </u> hrs/day) @ <u>      </u> /hr = <u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>TOTAL S/S/H V - DOC/YR</u>	<u>      </u>	<u>      </u>	<u>\$ 21,025.</u>

TOTAL V - DOC/YR \$ 82,256.

TOTAL DOC/YR \$ 694,654.

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 1198 Commuters + Noncommuters \$ 515,975.

Supplemental Service BCC

TOTAL REVENUE \$ 515,975.

GROSS PROFIT FROM OPERATIONS \$ (178,679.)

FINANCING

Payment to Principal and Interest/Yr.      @ 7.0%      @ 8.75%

<u>2</u> Vessels @ \$ <u>700,000.</u> Ea.	<u>\$ 1,400,000</u>
<u>Vessels</u> @ <u>      </u> Ea.	<u>      </u>

<u>TOTAL</u>	<u>\$ 1,400,000.</u>	<u>\$ 130,250.</u>	<u>\$ 148,463.</u>
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VESSEL DIRECT OPERATING COST REVENUE & FINANCING - SYSTEM VIIc  
Southern MARIN SERVICE

Vessels: 2 Hawaii State

Operating  
Model No. I base demand

Regular Service: 50¢ Fare

<u>16</u> Hour Weekdays	<u>30</u>	Round Trips/Day
<u>10</u> Hour Sat/Sun/Holidays	<u>18</u>	Round Trips/Day
<u>30</u> Minute Intervals	<u>30</u>	Minutes Block Time

Supplemental Service Fare

Bay Circle Cruises/Day (Off-Peak Weekdays)

Bay Circle Cruises/Day (Sat/Sun/Holidays)

Peak Commuter Service: 50% Fare  
30 Minute Interval

DIRECT OPERATING COST (DOC)

Fixed Direct Operating Cost/Year

<u>2</u> Vessels (5082 hrs) @ \$ <u>306,179</u>	\$ <u>612,358</u>
<u>  </u> Vessels ( <u>  </u> hrs) @ \$ <u>  </u>	<u>  </u>
<u>  </u> TOTAL F - DOC/YR	\$ <u>612,358</u>

Direct Operating Cost/Year - Underway (V - DOC)

252 Weekdays 16 hrs/day

<u>2</u> Vessels ( <u>12.5</u> hrs/day) @ <u>13.10</u> /hr = \$ <u>82,530</u>	
<u>  </u> Vessels ( <u>  </u> hrs/day) @ <u>  </u> /hr = <u>  </u>	
<u>  </u> Total Weekday V - DOC/Yr.	\$ <u>82,530</u>

113 Sat., Sun. & Holidays (10 hrs/day)

<u>2</u> Vessels ( <u>7.5</u> hrs/day) @ <u>13.10</u> /hr = \$ <u>22,205</u>	
<u>  </u> Vessels ( <u>  </u> hrs/day) @ <u>  </u> /hr = <u>  </u>	
<u>  </u> TOTAL S/S/H V - DOC/YR	\$ <u>22,205</u>

TOTAL V - DOC/YR \$ 104,735

TOTAL DOC/YR \$ 717,093

ESTIMATED TOTAL ANNUAL REVENUE:

Regular Service 1,198 Commuters + Noncommuters \$ 515,975

Supplemental Service BCC

TOTAL REVENUE \$ 515,975

GROSS PROFIT FROM OPERATIONS \$ (201,118)

FINANCING

Payment to Principal and Interest/Yr. 7.0% 8.75%

<u>2</u> Vessels @ \$ <u>682,000</u> Ea.	\$ <u>1,364,000</u>
<u>  </u> Vessels @ \$ <u>  </u> Ea.	<u>  </u>

<u>TOTAL</u>	\$ <u>1,364,000</u>	\$ <u>126,901</u>	\$ <u>144,645</u>
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## SECTION VI

### VI. COST AND REVENUE SUMMARIES, 1972

1. Profit and Loss Statement
2. Capital Investment & Debt Service Summary



GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	I a
Southern Marin County Service - System	VII a

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,148,747
Bay Circle Cruises	<u>1,931,507</u>
Southern Marin Service	<u>515,975</u>
<b>TOTAL REVENUE</b>	<b>\$ 4,596,229</b>

Cost of Services:

<b>Vessel Expense</b>	
Central Marin Service	
& Bay Circle Cruises	<u>3,407,860</u>
Southern Marin Service	<u>571,341</u>
<b>Terminal Expense</b>	<b><u>323,574</u></b>
<b>TOTAL COST OF SERVICES</b>	<b><u>4,302,775</u></b>

<b>GROSS PROFIT FROM OPERATIONS</b>	<b>\$ 293,454</b>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
<b>NET INCOME (Without Financing Expense)</b>	<b>\$ 42,479</b>

FINANCING:

	@ 7.0%	@ 8.75%
System I a	\$ 976,878	\$ 1,113,476
System VII a	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<b><u>1,595,101</u></b>	<b><u>1,818,146</u></b>
<b>NET INCOME</b>	<b><u>- 42,479</u></b>	<b><u>- 42,479</u></b>
<b>Annual Subsidy</b>	<b><u>1,552,622</u></b>	<b><u>1,775,667</u></b>

COMMUTERS

System I a	3792
System VII a	<u>998</u>
<b>TOTAL</b>	<b><u>4790</u></b>
<b>Annual Subsidy Per Commuter</b>	<b>\$ 324.14</b>
	<b>\$ 370.71</b>

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System Ib  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,363,665
Bay Circle Cruises	<u>1,931,507</u>
Southern Marin Service	<u>515,975</u>
<b>TOTAL REVENUE</b>	<b>\$ 4,811,147</b>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>3,407,860</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
<b>TOTAL COST OF SERVICES</b>	<b><u>4,302,775</u></b>

GROSS PROFIT FROM  
 OPERATIONS \$ 508,372

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
NET INCOME (Without Financing Expense)	\$ <u>257,397</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>Ib</u>	<u>\$ 976,878</u>	<u>\$ 1,113,476</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<u>1,595,101</u>	<u>1,818,146</u>
NET INCOME	<u>- 257,397</u>	<u>- 257,397</u>
Annual Subsidy	<u>1,337,704</u>	<u>1,560,749</u>

COMMUTERS

System <u>Ib</u>	<u>4171</u>	
System <u>VIIa</u>	<u>998</u>	
<b>TOTAL</b>	<u>5169</u>	
Annual Subsidy Per Commuter	\$ <u>258.79</u>	\$ <u>301.94</u>

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IIa  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,784,887
Bay Circle Cruises	<u>1,573,350</u>
Southern Marin Service	<u>515,975</u>
<b>TOTAL REVENUE</b>	<b>\$ 4,874,212</b>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>3,584,068</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
<b>TOTAL COST OF SERVICES</b>	<b><u>4,478,983</u></b>

GROSS PROFIT FROM  
OPERATIONS \$ 395,229

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
NET INCOME (Without Financing Expense)	<u>\$ 144,254</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>IIa</u>	\$ <u>1,144,343</u>	<u>\$ 1,304,357</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<b"><u>1,762,566</u></b">	<b"><u>2,009,027</u></b">
NET INCOME	<u>- 144,254</u>	<u>- 144,254</u>
Annual Subsidy	<u>1,618,312</u>	<u>1,864,773</u>

COMMUTERS

System <u>IIa</u>	4500
System <u>VIIa</u>	<u>998</u>
<b>TOTAL</b>	<b"><u>5498</u></b">
Annual Subsidy Per Commuter	\$ <u>294.35</u>
	<u>\$ 339.17</u>

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IIb  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,928,740
Bay Circle Cruises	<u>1,573,350</u>
Southern Marin Service	<u>515,975</u>
TOTAL REVENUE	<u>\$ 5,018,065</u>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>3,584,068</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
TOTAL COST OF SERVICES	<u>4,478,983</u>

GROSS PROFIT FROM OPERATIONS	<u>\$ 539,082</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
NET INCOME (Without Financing Expense)	<u>\$ 288,107</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>IIb</u>	\$ 1,144,343	\$ 1,304,357
System <u>VIIa</u>	130,250	148,463
Dredging & Floats	281,992	321,423
Onshore Terminals	205,981	234,784
TOTAL	1,762,566	2,009,027
NET INCOME	- 288,107	- 288,107
Annual Subsidy	1,474,459	1,720,920

COMMUTERS

System <u>IIb</u>	4800
System <u>VIIa</u>	998
TOTAL	<u>5798</u>

Annual Subsidy Per Commuter	\$ 254.31	\$ 296.81
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IIIa  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,338,687
Bay Circle Cruises	<u>949,050</u>
Southern Marin Service	<u>515,975</u>
TOTAL REVENUE	<u>\$ 3,803,712</u>

Cost of Services:

<u>Vessel Expense</u>	
Central Marin Service	
& Bay Circle Cruises	<u>1,905,249</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
TOTAL COST OF SERVICES	<u>2,800,164</u>

GROSS PROFIT FROM  
 OPERATIONS \$ 1,003,548

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
NET INCOME (Without Financing Expense)	<u>\$ 752,573</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>IIIa</u>	\$ 383,774	\$ 437,437
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,001,997</u>	<u>1,142,107</u>
NET INCOME	<u>- 752,573</u>	<u>- 752,573</u>
Annual Subsidy	<u>249,424</u>	<u>389,534</u>

COMMUTERS

System <u>IIIa</u>	3015
System <u>VIIa</u>	998
TOTAL	<u>4013</u>
Annual Subsidy Per Commuter	\$ 62.15
	<u>\$ 97.07</u>

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IIIb  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 1,981,206
Bay Circle Cruises	<u>1,401,464</u>
Southern Marin Service	<u>515,975</u>
<b>TOTAL REVENUE</b>	<u>\$3,898,645</u>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	2,240,565
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
<b>TOTAL COST OF SERVICES</b>	<u>3,135,480</u>

GROSS PROFIT FROM OPERATIONS	<u>\$ 763,165</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
<b>NET INCOME (Without Financing Expense)</b>	<u>\$ 512,190</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>IIIb</u>	\$ 460,528	\$ 524,924
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<u>1,078,751</u>	<u>1,229,594</u>
NET INCOME	<u>- 512,190</u>	<u>- 512,190</u>
Annual Subsidy	<u>566,561</u>	<u>717,404</u>

COMMUTERS

System <u>IIIb</u>	3500
System <u>VIIa</u>	998
<b>TOTAL</b>	<u>4498</u>

Annual Subsidy Per Commuter	\$ <u>125.96</u>	\$ <u>159.49</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	<u>IVa</u>
Southern Marin County Service - System	<u>VIIa</u>

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 2,338,687
Bay Circle Cruises	<u>949,050</u>
Southern Marin Service	<u>515,975</u>
<b>TOTAL REVENUE</b>	<b>\$3,803,712</b>

Cost of Services:

<b>Vessel Expense</b>	
Central Marin Service	
& Bay Circle Cruises	<u>2,410,821</u>
Southern Marin Service	<u>571,341</u>
<b>Terminal Expense</b>	<b><u>323,574</u></b>
<b>TOTAL COST OF SERVICES</b>	<b><u>3,305,736</u></b>

<b>GROSS PROFIT FROM</b>	
<b>OPERATIONS</b>	<b>\$ 497,976</b>

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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<b>NET INCOME</b>	
<b>(Without Financing Expense)</b>	<b>\$ 247,001</b>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>IVa</u>	\$ 767,547	\$ 874,874
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<b><u>1,385,770</u></b>	<b><u>1,579,544</u></b>
NET INCOME	<u>- 247,001</u>	<u>- 247,001</u>
Annual Subsidy	<u>1,138,769</u>	<u>1,332,543</u>

COMMUTERS

System <u>IVa</u>	<u>3015</u>
System <u>VIIa</u>	<u>998</u>
<b>TOTAL</b>	<b><u>4013</u></b>

<b>Annual Subsidy Per Commuter</b>	<b>\$~ 283.77</b>
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<b>\$ 332.06</b>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System IVb  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 1,981,206
Bay Circle Cruises	<u>1,401,464</u>
Southern Marin Service	<u>515,975</u>
TOTAL REVENUE	<u>\$ 3,898,645</u>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>2,838,598</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
TOTAL COST OF SERVICES	<u>3,733,513</u>

GROSS PROFIT FROM  
 OPERATIONS \$ 165,132

Administrative Expenses:

General Administrative Overhead	<u>250.975</u>
NET INCOME (Without Financing Expense)	<u>\$ (85.843)</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>IVb</u>	\$ 921,056	\$ 1,049,848
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,539,279</u>	<u>1,754,518</u>
NET INCOME	<u>( 85,843)</u>	<u>( 85,843)</u>
Annual Subsidy	<u>1,625,122</u>	<u>1,840,361</u>

COMMUTERS

System <u>IVb</u>	<u>3500</u>
System <u>VIIa</u>	<u>998</u>
TOTAL	<u>4498</u>

Annual Subsidy Per Commuter \$ 361.30 \$ 409.15

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	<u>Va</u>
Southern Marin County Service - System	<u>VIIa</u>

Profit & Loss Statement

Revenue:

Central Marin Service	\$ <u>2,338,687</u>
Bay Circle Cruises	<u>564,612</u>
Southern Marin Service	<u>515,975</u>
<b>TOTAL REVENUE</b>	<u>\$ 3,419,274</u>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>1,821,016</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
<b>TOTAL COST OF SERVICES</b>	<u>2,715,931</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>703,343</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
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NET INCOME (Without Financing Expense)	\$ <u>452,368</u>
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FINANCING:

	@ 7.0%	@ 8.75%
System <u>Va</u>	<u>378,657</u>	<u>431,604</u>
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<u>996,880</u>	<u>1,136,274</u>
NET INCOME	<u>- 452,368</u>	<u>- 452,368</u>
Annual Subsidy	<u>544,512</u>	<u>683,906</u>

COMMUTERS

System <u>Va</u>	<u>3015</u>
System <u>VIIa</u>	<u>998</u>
<b>TOTAL</b>	<u>4013</u>

Annual Subsidy Per Commuter	\$ <u>135,69</u>	\$ <u>170,42</u>
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GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System Vb  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ <u>1,981,206</u>	<u>Vb</u>
Bay Circle Cruises	<u>1,184,414</u>	
Southern Marin Service	<u>515,975</u>	
<b>TOTAL REVENUE</b>	<b>\$ 3,681,595</b>	

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>2,212,690</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
<b>TOTAL COST OF SERVICES</b>	<b><u>3,107,605</u></b>

GROSS PROFIT FROM  
 OPERATIONS \$ 573,990

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
<b>NET INCOME</b>	
(Without Financing Expense)	\$ <u>323,015</u>

FINANCING:

	@ 7.0%	@ 8.75%
System Vb	<u>\$ 473,320</u>	<u>\$ 539,505</u>
System VIIa	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<b><u>1,091,543</u></b>	<b><u>1,244,175</u></b>
NET INCOME	<u>- 323,015</u>	<u>- 323,015</u>
Annual Subsidy	<u>768,528</u>	<u>921,160</u>

COMMUTERS

System Vb	<u>3500</u>	
System VIIa	<u>998</u>	
<b>TOTAL</b>	<b><u>4498</u></b>	
Annual Subsidy Per Commuter	\$ <u>170.86</u>	\$ <u>204.79</u>

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	<u>VIa</u>
Southern Marin County Service - System	<u>VIIa</u>

Profit & Loss Statement

Revenue:

Central Marin Service	\$ <u>2,338,687</u>
Bay Circle Cruises	
Southern Marin Service	<u>515,975</u>
TOTAL REVENUE	\$ <u>2,854,662</u>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>2,034,994</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
TOTAL COST OF SERVICES	<u>2,929,909</u>

GROSS PROFIT FROM	
OPERATIONS	\$ <u>(75,247)</u>

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
NET INCOME	
(Without Financing Expense)	\$ <u>(326,222)</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>VIa</u>	\$ 739,636	\$ 843,060
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
TOTAL	<u>1,357,859</u>	<u>1,547,730</u>
NET INCOME	<u>( 326,222)</u>	<u>( 326,222)</u>
Annual Subsidy	<u>1,684,081</u>	<u>1,873,952</u>

COMMUTERS

System <u>VIa</u>	<u>3015</u>	
System <u>VIIa</u>	<u>998</u>	
TOTAL	<u>4013</u>	
Annual Subsidy Per Commuter	\$ <u>419.65</u>	\$ <u>466.97</u>

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System VIb  
 Southern Marin County Service - System VIIa

Profit & Loss Statement

Revenue:

Central Marin Service	\$ 1,981,206
Bay Circle Cruises	883,111
Southern Marin Service	515,975
<b>TOTAL REVENUE</b>	<b>\$ 3,380,292</b>

Cost of Services:

<b>Vessel Expense</b>	
Central Marin Service	
& Bay Circle Cruises	2,713,326
Southern Marin Service	571,341
<b>Terminal Expense</b>	<b>323,574</b>
<b>TOTAL COST OF SERVICES</b>	<b>3,608,241</b>

GROSS PROFIT FROM  
 OPERATIONS \$ (227,949)

Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
<b>NET INCOME</b>	
(Without Financing Expense)	\$ <u>(478,924)</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>VIb</u>	\$ 986,182	\$ 1,124,080
System <u>VIIa</u>	130,250	148,463
Dredging & Floats	281,992	321,423
Onshore Terminals	205,981	234,784
<b>TOTAL</b>	<b>1,604,405</b>	<b>1,828,750</b>
NET INCOME	(478,924)	(478,924)
Annual Subsidy	2,083,329	2,307,674

COMMUTERS

System <u>VIb</u>	3500
System <u>VIIa</u>	998
<b>TOTAL</b>	<b>4498</b>
<b>Annual Subsidy Per Commuter</b>	<b>\$ 463.17</b>
	\$ 513.04

GOLDEN GATE COMMUTER FERRY SYSTEM

Central Marin County Service - System	<u>VIc</u>
Southern Marin County Service - System	<u>VIIa</u>

Profit & Loss Statement

Revenue:

Central Marin Service	\$ <u>1,981,206</u>
Bay Circle Cruises	<u>883,111</u>
Southern Marin Service	<u>515,975</u>
<b>TOTAL REVENUE</b>	<u>\$ 3,380,292</u>

Cost of Services:

Vessel Expense	
Central Marin Service	
& Bay Circle Cruises	<u>2,598,632</u>
Southern Marin Service	<u>571,341</u>
Terminal Expense	<u>323,574</u>
<b>TOTAL COST OF SERVICES</b>	<u>3,493,547</u>

GROSS PROFIT FROM OPERATIONS	\$ <u>(113,255)</u>
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Administrative Expenses:

General Administrative Overhead	<u>250,975</u>
NET INCOME (Without Financing Expense)	\$ <u>(364,230)</u>

FINANCING:

	@ 7.0%	@ 8.75%
System <u>VIc</u>	\$ 986,182	\$ 1,124,080
System <u>VIIa</u>	<u>130,250</u>	<u>148,463</u>
Dredging & Floats	<u>281,992</u>	<u>321,423</u>
Onshore Terminals	<u>205,981</u>	<u>234,784</u>
<b>TOTAL</b>	<u>1,604,405</u>	<u>1,828,750</u>
NET INCOME	<u>(364,230)</u>	<u>(364,230)</u>
Annual Subsidy	<u>1,968,635</u>	<u>2,192,980</u>

COMMUTERS

System <u>VIc</u>	<u>3500</u>	
System <u>VIIa</u>	<u>998</u>	
<b>TOTAL</b>	<u>4498</u>	
Annual Subsidy Per Commuter	\$ <u>437.67</u>	\$ <u>487.55</u>

**CAPITAL INVESTMENT & DEBT SERVICE SUMMARY**  
**Recommended Corte Madera & Sausalito Service, System Ib & VIIa**  
**(100% Borrowed Capital)**

	<u>Capital Investment</u>	<u>8.75% Annual Debt Service</u>	<u>7.0% Annual Debt Service</u>
<b>VESSELS</b>			
5 Spaulding-165 Class	\$10,500,000		
1 Golden Gate Class	700,000		
1 MV "Golden Gate"	<u>700,000</u>		
<b>Total</b>	<b>\$11,900,000</b>	<b>\$1,261,940</b>	<b>\$1,107,128</b>
<b>DREDGING &amp; FLOATS</b>			
Corte Madera Creek	\$ 1,905,000		
Tiburon	270,000		
Sausalito	270,000		
San Francisco	<u>586,000</u>		
<b>Total</b>	<b>3,031,000</b>	<b>321,423</b>	<b>281,992</b>
<b>ONSHORE TERMINALS (1)</b>			
<b>Corte Madera Creek</b>			
Concrete Pier	\$ 634,000		
Terminal Building	300,000		
Parking Area	175,000		
Warehouse & Shops	105,000		
Hydraulic Fill	<u>350,000</u>		
<b>Total</b>	<b>1,564,000</b>	<b>165,855</b>	<b>145,508</b>
<b>Tiburon</b>			
Concrete Pier	\$ 350,000		
Miscellaneous	<u>50,000</u>		
<b>Total</b>	<b>400,000</b>	<b>42,418</b>	<b>37,214</b>
<b>San Francisco (2)</b>			
Waiting Area	\$ 200,000		
Miscellaneous	<u>50,000</u>		
<b>Total</b>	<b>250,000</b>	<b>26,511</b>	<b>23,259</b>
<b>TOTAL INVESTMENT</b>	<b>\$17,145,000</b>		
<b>TOTAL ANNUAL DEBT SERVICE</b>		<b>\$1,818,147</b>	<b>\$1,595,101</b>

(1) Onshore Terminal cost estimates are provided for the convenience of the Bridge District. These estimates are beyond the scope of this study but are included to determine the overall cost of the system. Estimates do not include the cost of land acquisition or leasing.

(2) San Francisco Terminal estimate assumes that the cost of pier is part of BARTD project and not chargeable to the ferryboat project. It assumes also that other Ferry Building terminal improvements will be borne by those redeveloping the Ferry Building complex.





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